Vol. XI, No. 5 May, 1935

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EXTERMINATING • CLEANSERS • SANITARY SUPPLIES

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NEW YORK

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FALCON DEODORANT BLOCS

FALCON BLOCKETTES



FALCON PERFUMED CRYSTALS

ONE WHIFF . . .

is better than a thousand words

Into your customer's hands, put a Falcon Bloc . . . ask him to smell it. Then, as he breaks the cellophane wrapper and catches the full fragrance, watch him smile.

Such pleasing fragrance comes only from the finest perfumes. Add to this our original process of molding cold, under tons of pressure, and you have the reasons why Falcon Deodorants always give unfailing deodorization and fragrance.

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HUNTINGTON INDIANA

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for the
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- Theatre Sprays
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- Wall Containers
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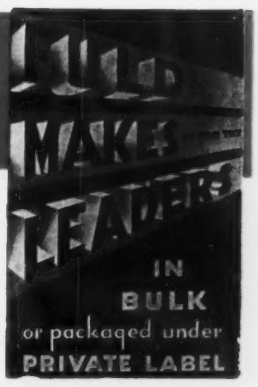


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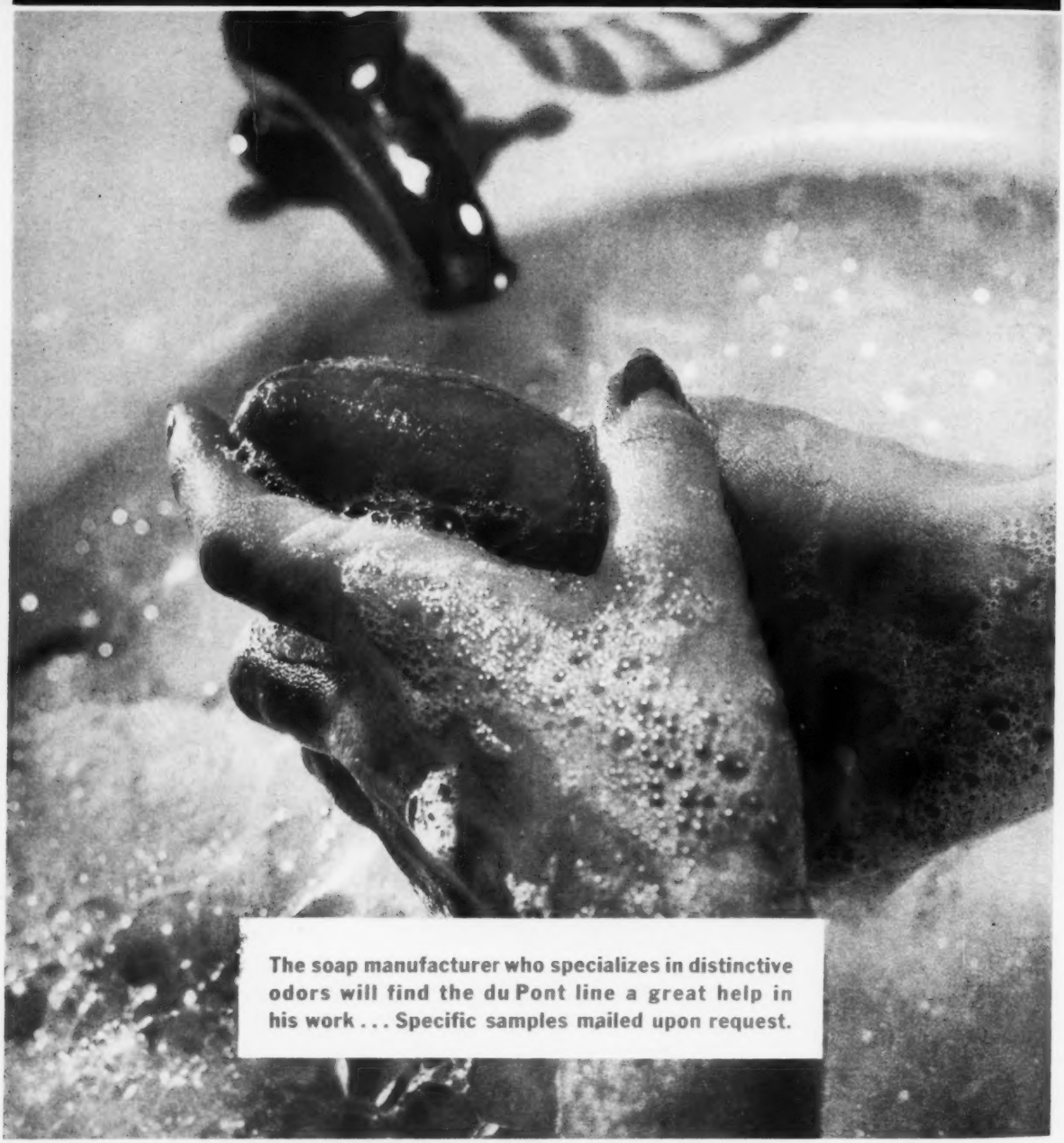
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E. I. DU PONT DE NEMOURS & CO., INC. DU PONT FINE CHEMICALS DIV., WILMINGTON, DEL.

SOAP

Reg. U. S. Patent Office

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Number 5

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Published monthly on the 15th by

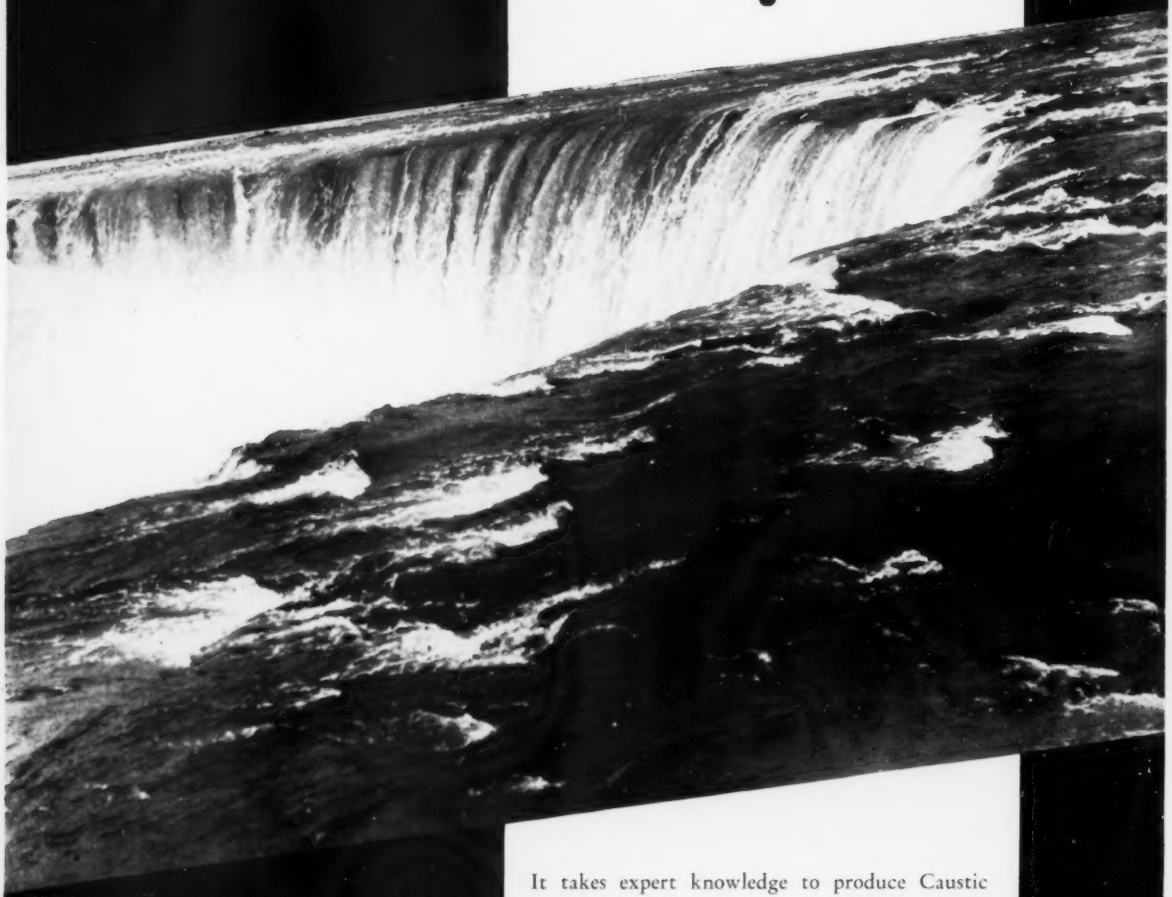
MAC NAIR-DORLAND COMPANY, INC.

254 WEST 31st STREET NEW YORK, N. Y.

Subscription rate, $3.00 per year. Foreign, except Canada, $4.00. Canadian, $5.00. Copy closing dates—7th of month of issue for reading matter and 25th of month preceding month of issue for display advertising. Entered as second-class matter, April 11, 1931, at Post Office, New York, under act of March 3, 1879. Mail circulation, April, 1935 issue 3,032 copies. Total distribution, 3,200.

PROFIT BY OUR LONG EXPERIENCE WITH

CAUSTIC POTASH!

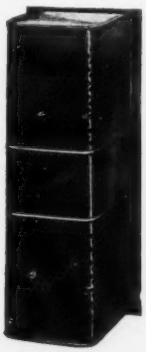


It takes expert knowledge to produce Caustic Potash . . . and to service it properly. That's why you should be extra cautious in choosing your source of supply. Our experience with Caustic Potash covers the entire history of this product since it was first produced in America. Niagara Caustic Potash was the first to be made in this country, and we have spent more than thirty years in improving its quality and use. You will find our long experience a valuable asset —when special problems arise.

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WARM WEATHER
BREEDS ODORS INSECTS ~ AND
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Oil Soap
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Rubless Wax
Fabric Cleaner
Furniture Cream

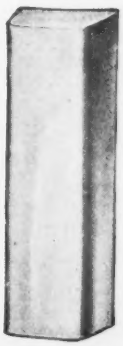
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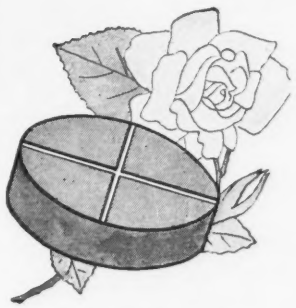
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- ☐ Rubless Wax
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"BEAMAX" is sold in drums, half-drums, and quarter-drums, as well as in 10-gal., 5-gal., and 1-gal. cans. It is a perfect emulsion and will not settle out.

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THE DAVIES-YOUNG SOAP COMPANY
Dayton, Ohio

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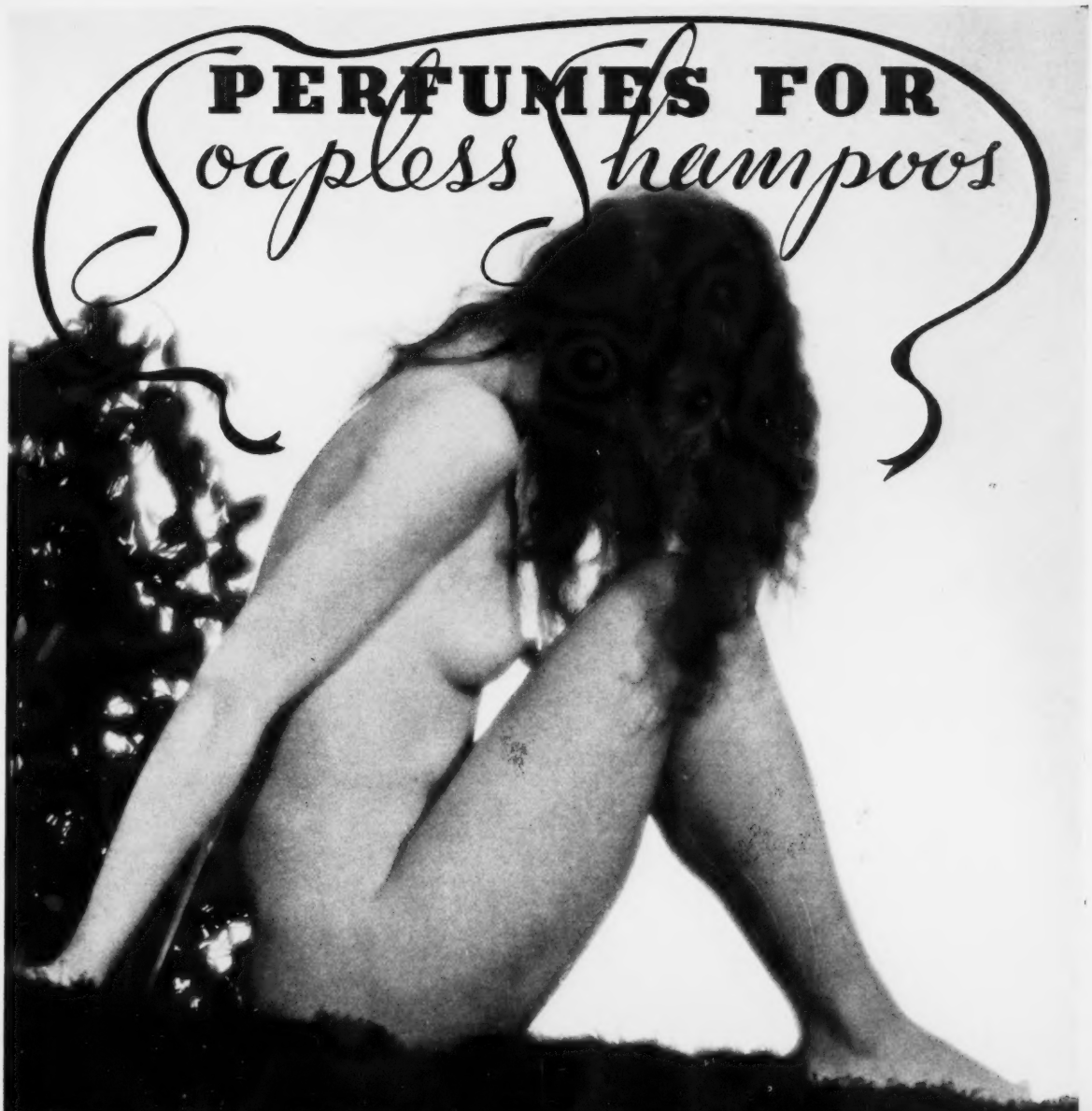
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Anchor Closures

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IN these four fragances, Felton has developed perfumes which are fully effective in neutralizing the disagreeable odor of sulphanated oils and will impart to your finished product delightful fragrance at minimum cost.

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FELTON CHEMICAL COMPANY

Executive Offices and Factory

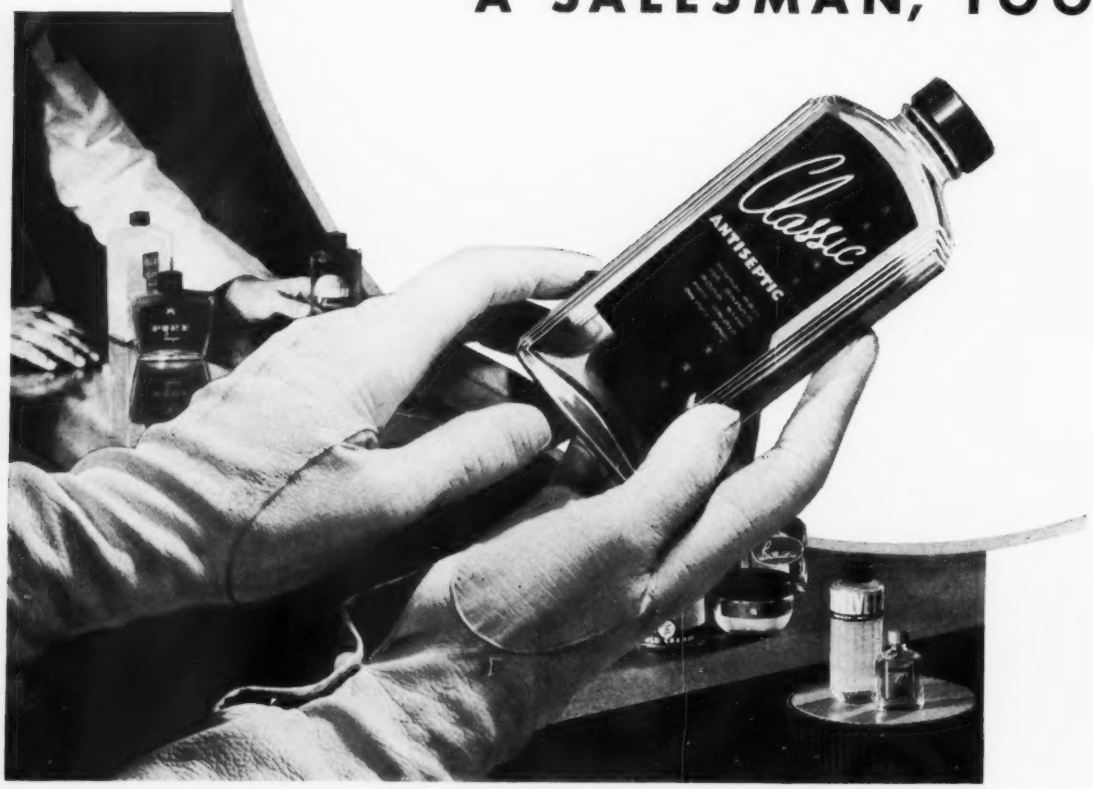
603 JOHNSON AVENUE, BROOKLYN, N. Y.

Manufacturers of AROMATIC CHEMICALS, NATURAL ISOLATES, PERFUME OILS, ARTIFICIAL FLOWER and FLAVOR OILS

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In your battle for sales

MAKE YOUR PACKAGE A SALESMAN, TOO



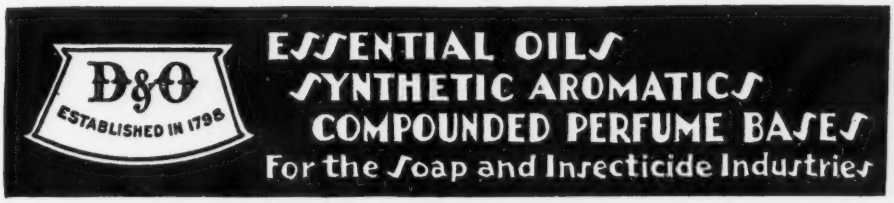
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"The integrity of the house is reflected in the quality of its products".

DOW ORGANIC SOLVENTS

PRODUCT	DESCRIPTION	USES
CARBON TETRACHLORIDE	Heavy, water-white liquid with an aromatic odor and a sharp taste. It is non-flammable and non-explosive in either the liquid or vapor state. It is completely volatile, leaving no residual odor. Boiling point—°C.....76.8 Flash point .....None Weight per gallon—lbs.....13.25 Solubility—Miscible with most organic solvents; practically insoluble in water.	Degreasing textile fibres, cleaning and spotting textiles and clothing, and degreasing and cleaning machinery, leather, paper stock, and photographic films. Extracting fats, oils, waxes, alkaloids, and resins. Ingredient in paint and varnish removers, and in rubber cements. Fumigant for moth and insect life in textiles, furs, and grains.
CHLOROFORM TECHNICAL	Clear, colorless, volatile liquid with a sweet taste and a characteristic odor. Its vapors are highly anaesthetic and are non-flammable. Leaves no odor after evaporation. Boiling point—°C.....61.2 Weight per gallon—lbs.....12.51 Solubility—Miscible with most organic solvents; slightly soluble in water.	Solvent in the rubber, photographic, and dry cleaning industries. Dissolves alkaloids, fats, and resins. Should not be used as a cleaning agent for cellulose acetate (celanese) fabrics.
ETHYLENE DICHLORIDE	Clear, water-white liquid with a pleasant chloroform-like odor. It is only slightly hydrolyzed in water. Boiling Range—°C.....83.7—84 Flash point —°C.....12 Weight per gallon—lbs.....10.5 Solubility—Miscible with most organic solvents; slightly soluble in water.	For cleaning and spotting work and for degreasing textiles, leather, and metals. For extracting natural oils from vegetable matter and in paint removers.
MONOCHLORBENZENE	Colorless, volatile liquid with benzene-like odor. Not considered a particularly dangerous solvent from a fire-hazard standpoint, although classed as a flammable material. Boiling Range—°C.....130.5—132 Flash point —°C. .....27.5—39 (Depends on Method) Weight per gallon—lbs..... 9.29 Solubility—Miscible with most organic solvents; insoluble in water.	As an ingredient in paint and varnish removers, as a general solvent, and in organic syntheses.
ORTHODICHLORBENZENE TECHNICAL	Oily, colorless liquid with a characteristic odor. Offers no special fire hazard, although it burns readily when ignited. Boiling Range—°C.....172—179 Flash point —°C.....between 63—77 Weight per gallon—lbs..... 10.7 Solubility—Miscible with most organic solvents; insoluble in water.	Solvent for waxes, ingredient in paint removers, and for removal of grease and tars from automobiles. Ingredient in sweeping compounds, an active insecticide in fly and other liquid sprays, and in manufacture of preservative paints. Recommended for control of termites.
PROPYLENE DICHLORIDE	Clear, water-white liquid with a sweetish odor. Not considered highly flammable, although flashes at room temperature. Boiling point—°C.....(when pure) 96.8 Flash point —°C.....16 Weight per gallon—lbs..... 9.62 Solubility—Miscible with most organic solvents; slightly soluble in water.	As a solvent in the rubber industry, as a paint and varnish remover, and as a general solvent. Used extensively, mixed with other solvents, for fumigating and dry cleaning, and also used in the manufacture of dry-cleaning soaps.
TETRACHLORETHYLENE	Clear, colorless liquid with a sweetish odor Boiling Range—°C.....118—122 Flash point .....None Weight per gallon—lbs..... 13.40 Solubility—Miscible with most organic solvents; insoluble in water.	As a general solvent, as an ingredient in detergent compositions, dry cleaning soaps, and as the liquid medium in transformers and high tension switches.
TRICHLORBENZENE	Colorless liquid Boiling Range—°C.....213—217 Flash point None to boiling point Weight per gallon—lbs..... 12.16 Solubility—Miscible with most organic solvents; insoluble in water.	As a dielectric fluid in fuses and, when mixed with suitable ingredients, in synthetic transformer oils. As a general solvent in the chemical industry and as a solvent for oil soluble dyes. As an addition agent in lubricating oils.

OTHER DOW PRODUCTS: COUMARIN • METHYL SALICYLATE • METHYL ANTHRANILATE
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Non-Sifting Packages. Shipped to you in barrels with paper liner—no loss either in transit or storage. Also comes in kegs and bags. Grades—fines, flake, globular, medium and coarse.

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THE GRASSELLI CHEMICAL COMPANY, INC.

Founded 1839 *Subsidiary of E. I. DuPont de Nemours & Co., Inc.* **Cleveland**

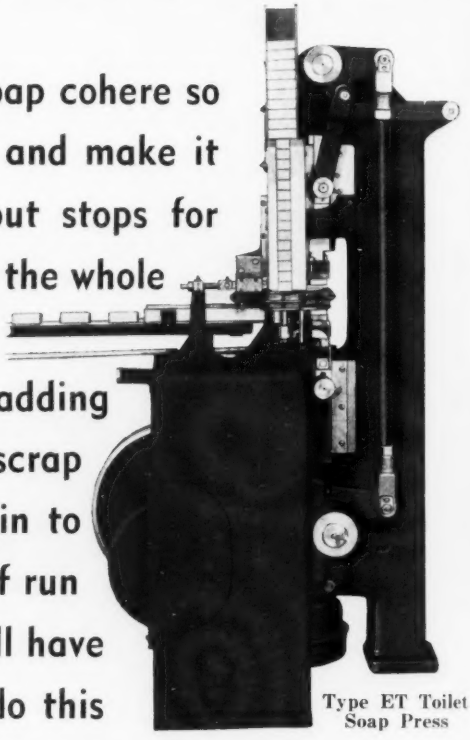
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JONES TOGGLE OPERATED PRESSES

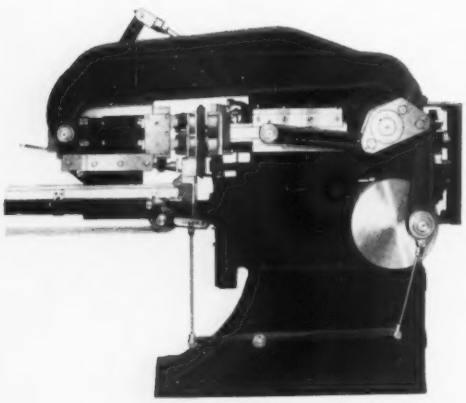
SAVE HUNDREDS OF DOLLARS MORE PER YEAR THAN EARLIER MODELS.



Type ET Toilet Soap Press

Their long toggle pressure makes the soap cohere so that particles do not stick to the dies and make it possible to run them for hours without stops for cleaning. Such stops on other presses put the whole line out of production for more minutes per day than you will realize without adding them up. Again, dies which accumulate scrap press only a few cakes before they begin to lose their finish and clean impression. If run too long before cleaning, many cakes will have to be remilled and pressed again. To do this costs money, but it costs more in loss of sales to neglect it.

Toggle Operated Presses obviate such losses, to say nothing of their higher production, freedom from early depreciation, multiplying by three the life of dies and conserving the nerves of your employees by their noiseless, efficient operation.



Type K Laundry Soap Press

Many successful soap makers are replacing other models with

JONES TOGGLE PRESSES

R. A. JONES & COMPANY, INC.

P. O. BOX 485 • CINCINNATI, OHIO

SOAP

Volume Eleven Number Five

As the Editor Sees It . . . .

AN auction sale of the equipment and materials of an old-time soap firm, which had the misfortune of going bankrupt after many years in business, was held recently in an eastern city. The equipment brought about ten cents on the dollar. Stocks of raw materials and finished soaps, however, brought about eighty per cent of their present market value. In spite of some of the humorous remarks which were credited to the various soapmakers attending the sale, the prices which the raw materials brought are a rather good indication of what these same soapmakers think of the market.

SOME soapmakers lately have announced higher prices for their goods. The few announcements which we have seen, however, have been couched in such sad language that they have almost had us on the verge of tears before we finished reading them. They tell a plaintive tale of how this or that manufacturer has at last used up his supplies of low-cost fats and oils,—the full benefit of which has all been passed along to the dear old customers,—and that upon buying new stocks he has been amazed and shocked to learn that he has had to pay a much higher price, fifty or a hundred per cent higher. And because he is in the power of the big bad wolves who have their grip on oil and fat supplies, he is compelled with bleeding heart to advance the price of his Goo-Goo Brand Soap,—"made solely from the finest quality selected edible Cochin coconut oil",—a half-cent per pound.

Frankly, we think that half of the announcements of price changes,—some gushy, some sad, some plaintive,—are an insult to the intelligence of the average buyer. If the price change is an advance, the seller is usually so sad about it, and if it is a reduction, he is doing it all because he loves his dear customers so. Why all the literary tripe? The buyer is not altogether a fool. He knows the facts, probably just as well as the manufacturer.

Some day, we hope, the standard form for price change announcements is going to be something like the following: "Owing to an increase of twenty-five per cent in raw material costs, we have this day advanced our prices twenty-five per cent, according to the following schedule." But then, where will buyers get their sad stories?

ON several occasions recently, we have been asked for our views on the future of the oil and fat markets,—not one or two months ahead, but one, two, three years ahead. All of which reminds us quite a bit of the bank president who in his rather extended stock market operations in the palmy days of 1928, made it a regular habit to ask the advice of his favorite speakeasy bartender. To ask the opinion of anybody on the future of the fat market,—the market two years from now, or even one year,—is so to surround the opinion with "ifs" and "buts" as to make it of no value. In this day and age, the future of oil and fat prices for American consumers rests too much in Washington in the hands of that august body known as Congress. To say that the future is in the lap of the gods, is tough on the gods. Rather, it is in the back pockets of those gentlemen from far places who meet together and think up new ideas for taxes.

If the present three-cent excise tax on coconut, palm oil, et al, continues,—and there seems

to be little chance for some time that it will be abandoned,—the opinion seems quite general that prices cannot decline materially from current levels. The weight of demand which has been shifted into the cheaper fats, foots, soapstock, and the like, may even bring acute shortages in these products. At any rate, it looks like rendering and refining operations are going to be more profitable for some time to come. And for the balance of 1935, at least, it does not look to us as though soapers are going to buy fats at any great savings.

In looking at the market from the angle of the long time trend, one thing, we believe, should be borne in mind. High prices have invariably been the means of bringing out increased production. The longer the period of high prices, the greater the time producers have to increase output and send their goods to market to take advantage of the higher levels. In a twenty-year study of commodity markets, and especially the oil and fat markets, we have noted that high prices have never failed to correct a shortage no matter how acute, and usually in less time than has been generally anticipated. At the same time, the artificial support of the present excise tax looms large, being in fact a three-cent base underlying the entire market. That it will continue to act as a strong stimulus to domestic fat production is obvious. That it may in time react unfavorably to American oil and fat producers through undue stimulation of output, is a possibility. That it may be to the eventual advantage of fat consumers is also a possibility,—jut as the chemical tariff of the past fifteen years has reacted immeasurably to the benefit of American chemical consumers of today.

To us, the future of oils and fats two or three years hence is too clouded with uncertainties to hazard even a guess which might have a basis of intelligence. As long as the excise tax remains, there appears to be little room for a recession in prices. As for the balance of 1934, the chances are that a fairly stable market will continue with little backsliding from current levels and a possibility of higher figures among the lower grade fatty materials.

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BEFORE the recent meeting of the American Chemical Society in New York, the president of American Cyanamid stated in effect that if the Government would only let industry alone long enough, it could go a long ways toward pulling the country out of the depression and eliminating unemployment. And how harassed industry will say "amen" to these sentiments. But as long as the country is run by politicians, we must remember that solving the unemployment problem is secondary to the method by which it is solved. The solution to be acceptable to the political horde cannot be direct and businesslike. It must be sufficiently involved that its administration will mean more jobs for the faithful and more votes at the next election,—and more taxes for industry.

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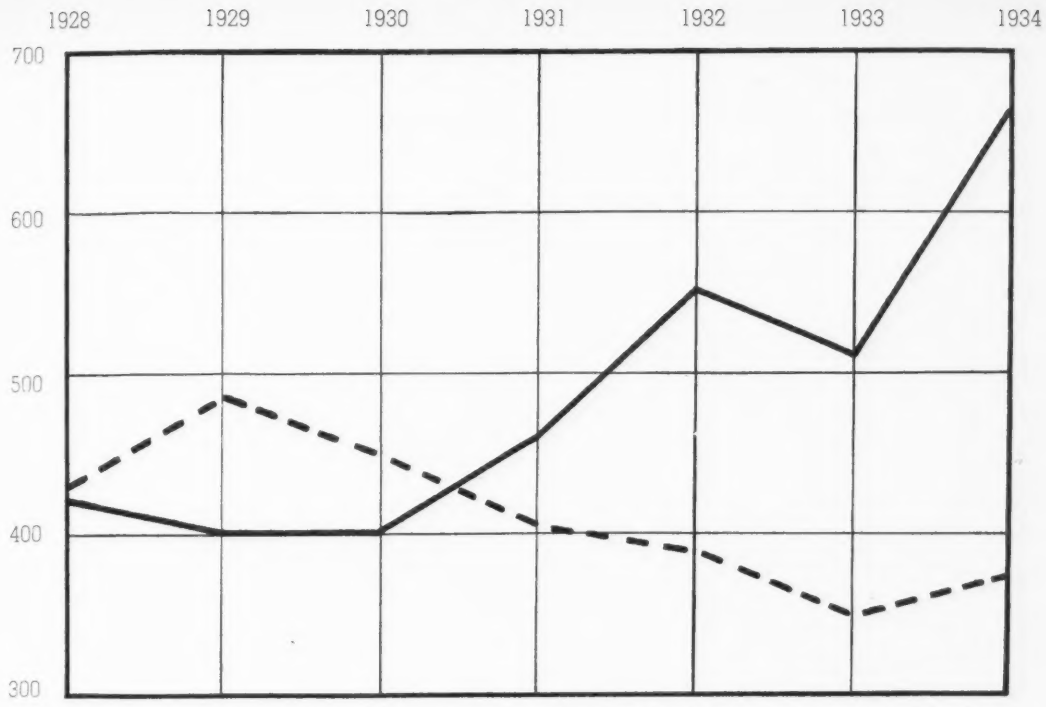
NOW it is the turn of the soap manufacturers of Canada to protest against luxury taxes of five to ten per cent being placed on ordinary toilet soap, shaving cream, and tooth paste in addition to the regular six per cent sales tax. Like their American fellows, Canadian manufacturers have protested to their government that it is decidedly inconsistent to foster health and cleanliness campaigns on the one hand and on the other to add additional taxes on the products which provide the means of bodily cleanliness. In our opinion, "inconsistent" is putting it mildly.

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A BILL to "regulate" the manufacture and sale of proprietary products, cosmetics and drugs, which is one of the worst things of its kind yet to arise in the vast 1935 crop of wild and ignorant state legislation, is now before the Illinois legislature. Anything which has to do with "the structure or any function of the human body" is involved. This means germicides, disinfectants, cosmetics, shampoos, and a host of allied products. The bill calls for a license fee of $2,500 per year for such manufacturers to do business in Illinois. In a supposedly democratic nations such as ours where the little fellow is told that he has just as good a chance as the big fellow,—and particularly in view of the high-sounding gab which is being handed out from Washington and state capitols all over about social security, equality, etc.,—such a figure is almost funny. Imagine the host of small firms doing business in Illinois paying any such fee. The time for the manufacturers of that state to kill off this bill is right now!

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After studying a survey of the household soap market of Milwaukee, we come to the unique conclusion that the products which are advertised most get most of the business.



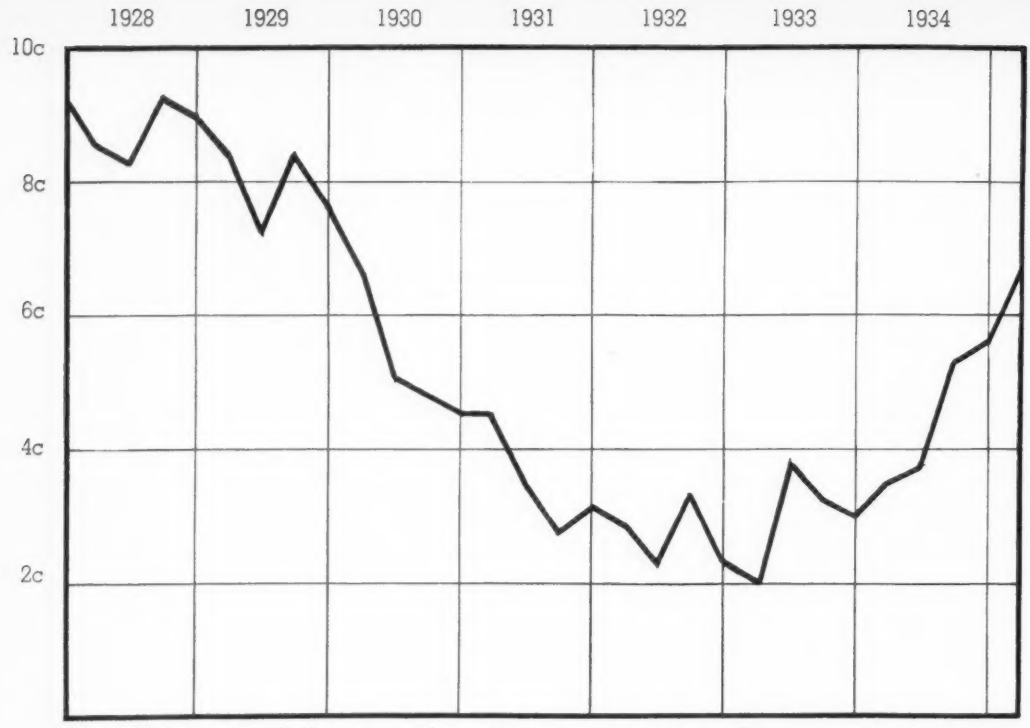
Approximate consumption at the soap kettle of Tallow (solid line) and Coconut Oil (broken line) compared yearly since 1928. Charted in millions of pounds.

What Future for OIL AND FAT PRICES?

AFTER the startling advance in prices of soap-making oils and fats over 1934 and the first quarter of 1935, a great question faces soap makers as to whether the upward movement has spent itself or not. Buyers the country over are trying to figure out whether prices have gone too high and a subsequent reaction may be expected, or whether present price levels only represent a temporary stopping point on the way up. On how accurately they gauge the market will determine in most cases what profits, if any, there will be in the coming year or two.

The answers to these market questions are particularly difficult to figure out in the present case, for not only do buyers have the natural market influences and developments to contend with, but they must also face the uncertain factor of Congress mixing in the picture. Until now, federal planning has been accompanied by what amounts to a 200 per cent rise in the soap maker's oil and fat costs, and the situation for the future is faced with the proposal to add a tax of three cents per pound on imported tallow. The original Bland measure amended recently, has eliminated the tallow impost, but there is a strong possibility that the renderers will shortly renew their demand for further protection.

Eliminating the legislative angle for the moment, what, we ask, would be the expected natural course of the oil and fat markets? Are prices unduly high now, or could the natural workings of the law of supply and demand tend to force them higher? Prices do seem high, of course, as compared with the levels of two and three years ago when tallow was costing the soap maker between two and three cents a pound, and coconut oil was only slightly higher. But, present prices do not seem to be unduly out of line when we compare them with the levels of 1926, 1927 and 1928, which we think of as years presenting a much more normal pattern. As a matter of fact, coconut oil, even with the addition of the three cent tax, bringing the present bulk price up to about eight and one-half cents a pound, costs now no more than it did six years ago. Tallow at six and a half cents a pound is low compared with the eight and a half cent price of 1927 and 1928.



Price of city extra Tallow charted for the past seven years, showing current price still well below the highs of 1928-29.

IN the oil and fat market, where it takes such a long stretch of time for supply to adjust itself to demand, the normal expectancy is for wide swings both up and down. A glut forces prices down, the low return discourages producers, and production is curtailed. Even when demand reappears strongly, there still must elapse a considerable period before supply can be built up again. Cattle do not breed as rapidly as rats, and tallow cannot be wished into existence to meet an overnight demand. Thus in the normal course, there is a temporary shortage until lagging production catches up to demand, and in this period, according to past experience, prices rise above what we have come to consider normal levels. If the normal level of coconut oil and tallow can be considered to be in the neighborhood of eight cents, we might expect an advance of as much as another 50 per cent or so, reasoning on this basis.

On the basis of government figures on the animal population of the United States, we seem to be in some such situation as that outlined above right at the moment. At the beginning of 1935, the number of cattle in the country was only sixty million, almost eight million below the figure for the previous year, which represents the largest reduction in any one year in the country's history. The present cattle population is only four million above the figure for January 1, 1928, which marked a low for recent years. A more severe cut has been registered in the hog population, as a result of the government's hog reduction program being added to natural causes. On January 1, 1935, the number of hogs was only thirty-seven million, a reduction of twenty million from January 1, 1934, and the smallest total to be recorded in fifty yars.

Not only are the fat producing animals fewer in number, but as a result of the drought, the dust storms and the high cost of feed, they are leaner than in previous years and the fat yield per head will be greatly reduced. Domestic tallow output is off about thirty per cent and has been for some time. Present stocks are estimated as sufficient for only about three or four months, and there seems to be little possibility of increasing the output for another six months at the very least. At the same time, there has been a marked increase in tallow consumption, both in the edible field as well as at the soap kettle, a condition which is a natural and direct outgrowth of the three-cent excise tax on coconut and other oils.

With the demand for tallow by American consumers in full bloom, the sharp increase in tallow imports over the past twelve months has been a logical consequence. Where the total tallow imports of the United States for the year 1933, were some 120 tons, imports since the middle of 1934 have averaged about five or six thousand tons per month. In these imports lies the basis for the more recent demand to put a three-cent excise tax on imported tallow and certain vegetable oils not covered by the present tax.

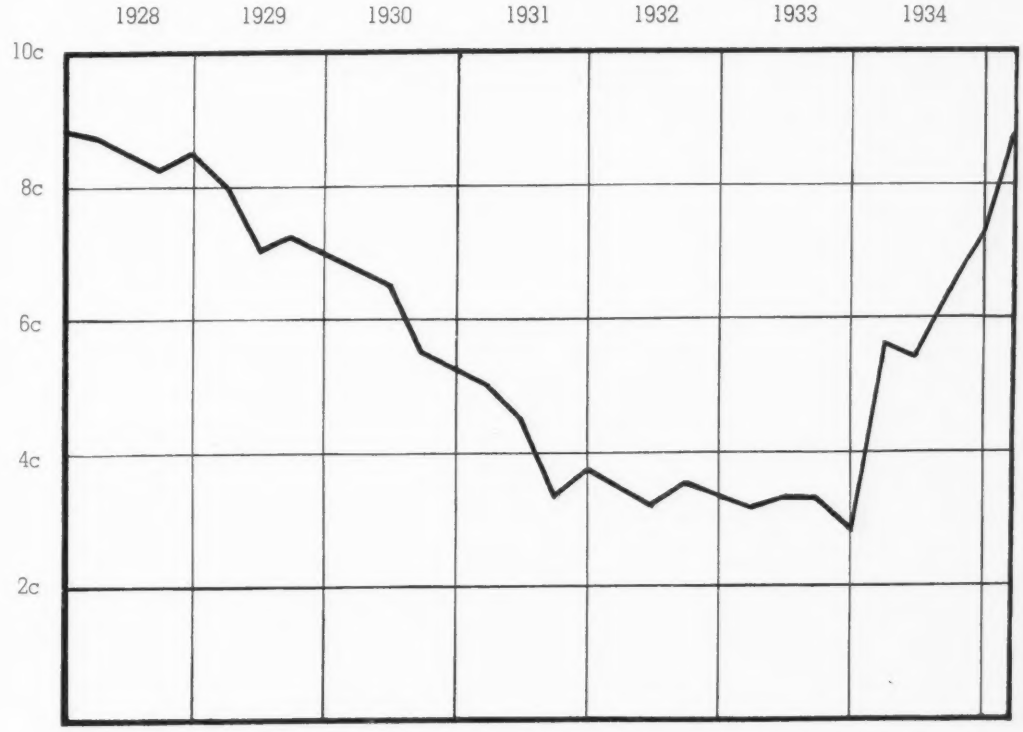
Thus we have added to the natural tendency of tallow to advance in price, this added legislative factor. If the idea incorporated in the original Bland bill—a three-cent

tax on imported tallow—becomes law under the pressure exerted by the renderers, higher tallow prices will most certainly lift the rest of the market to peaks which will seem dizzy when compared with the levels of two or three years ago. In discussing this situation with purchasing agents for several large buyers, the general impression was gleaned that they expected no material recession from present general price levels for the balance of the year, and were holding their breath in fear of what might happen if the tallow tax went through. As to its chances of going through, one market observer who keeps pretty closely in touch with Washington developments indicated that he thought the chances of eventual adoption, in spite of the present apparent sidetracking, were about even.

TURNING from tallow to coconut oil, palm oil, and other vegetable oils, followers of the market seem to be less in agreement that higher prices are a certainty. The drop of a cent in prices late in March unsettled the ideas of some who had prior to that time held altogether bullish views of the market. At the same time, off-hand predictions that prices will drop materially below present levels are conspicuous by their absence. Demand is expected to continue good, but unexpected and unexplained increases of production in both coconut and palm oils have been known to take place in the past when prices were attractive. A prediction for an increase in palm oil production encouraged by present prices has been made in two quarters without any qualifying "ifs." Any permanent effects of the late-lamented typhoon in the Philippines are also held to be very considerably overrated. Higher prices for copra and oil, after all, have always been the magic wand which brings out the production.

One bullish factor in the coconut oil market is the plethora of cake which is finding a scanty market in view of the present reduced animal population. With crushers getting short prices for their cake, they must bring up their average by getting more for their oil. At the same time the present price of palm kernel oil tends to minimize the probability of an advance in coconut oil. Palm kernel is already a cent a pound cheaper, and a further increase in coconut oil would only serve to widen this gap and make palm kernel an even more attractive buy.

Turning to another oil which was such an important factor in the oil and fat situation a few years ago, and which was in an important measure responsible for driving the prices of soap fats down to such low levels,—what of whale oil? The answer is that this oil is no longer an important market factor. The large unused stocks which hung over and oppressed the market for so long are gone now. A year ago there were still 300,000 tons of whale oil remaining from previous years' catches, but now this whole carry-over has been cleaned out. No substantial amount of whale oil may be expected on the market now until the 1935-1936 catch comes in.



Price of coconut oil, Manila tanks at N. Y., for the past seven years, including 3c excise tax from May, 1934.

THERE seems to be little relief in this direction, and no escape either in the cheaper fats to which the soap maker usually turns when his normal raw materials go too high in price. In one quarter, mention was made of the difficulty in some cases of securing adequate supplies of soap stock, foots, and cheap fatty acids at prices commensurate with the levels for finished materials. It was pointed out that the processing tax had turned so much demand into the channels for the by-products of domestic edible oil and other refining operations, that prices had been forced up out of proportion to the rise in the regular oils. Those soap manufacturers who have the technical skill and plant facilities for proper processing have turned more and more to fatty by-products as raw materials. Avoidance of the three-cent tax has left quite an adequate margin for cleaning up the low grade fatty acids and foots, and has enhanced their attractiveness as raw materils. At the same time, improper and inadequate preparation of these materials for the soap kettle in some instances has brought a marked increase in complaints of rancidity in finished products. In short, it is apparent that some manufacturers are going too far down the scale of lower-grade fatty materials in their efforts to avoid the excise tax and to hold their costs down. A reaction from consumers may force them back into the market for the same grade of fats which they were using a year ago, irrerspective of price.

Where the manufacturers of lower-priced soap products, particularly soap powders, had the market for soap stocks pretty much to themselves a year ago and before that, today they find themselves buying in competition with other soap makers and fatty acids manufacturers. In the case of the demand for fatty acid manufacture, this has been especially heavy. As a consequence, as one soap powder manufacturer put it, his group is "paying through the nose" for raw materials, which means actually that they are paying just about three times as much for soap stock as they paid a year ago. With the pressure of the excise tax literally forcing demand into the lower-grade materials, they do not see much hope of prices receding from current levels. In fact, they see the possibilities of an acute shortage of all the cheap fatty by-products.

And what of the future possibilities of synthetic fatty acids, fatty alcohol derivatives, and other substitutes for natural fats? This question can be answered briefly. For the next two or three years as factors in the practical solution of fat shortages and too high prices, synthetic fatty acids will not enter the picture. Ten years hence,—that is another story, and an interesting one. But now, with the soap industry thinking in fat at the rate of a billion and a half pounds per year, synthetic fatty acids ready to pump to the soap kettle are still at the end of the rainbow and probably will be for some years.

RETURNING once more to the governmental side of the picture, what relief may soap makers expect in the form of changes in legislation should fat raw material costs go too high? In the "planned economy" under which we are said to be operating, we should imagine that the plan of the government would be to bring prices up to normal levels and then maintain them there, eliminating the peaks as well as the valleys of the normal price curve. We should think that the government would look with as much disfavor on an abnormally high price level as it would on an abnormally low one, and would take steps to prevent too extended a rise. Thus we might possibly expect a graduated reduction, and possibly eventually a removal, of the present three cent excise tax when fat prices demonstrated that they were able to stay up at normal levels without this artificial support.

We might expect such a working out of the program in theory,—but unfortunately when theory conflicts with practical politics, the latter is usually the winner. One can imagine the protest that would arise from the "farmers" when our legislators started to discuss any such move in the "planned economy," and the tremendous pressure that would be put on Congress to maintain the taxes. Politicaly, it is always easy to give something, but next to impossible to take it away,—and this is why oils, fats, and politics are at present bedfellows.

The legislative factor thus seems to be the big unknown quantity in the oil and fat market equation. The buyer has only to figure out the normal course of the market, solve the equation a second time in terms of the unknown quantity, and he will then have a clear picture as to what the future course of the oil and fat markets will be. But at the same time, being long in the present market seems to be by far the most popular position among well-known soapers, both large and small.

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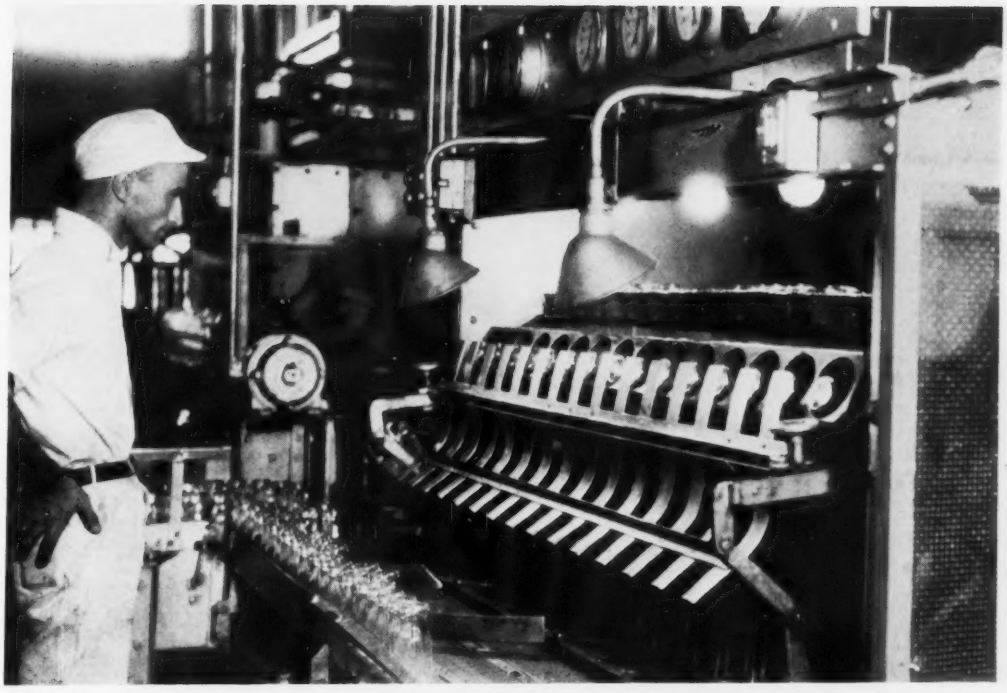
The estimated production of whale oil so far this year is reported to be smaller than in 1934, partly due to unfavorable weather conditions. On January 31, 1935, production was estimated at 1,430,000 barrels and on February 15, 1935, at 1,723,000 barrels, compared to 1,850,000 barrels and 2,105,000 barrels, respectively, in 1934. For the second half of January 1935, the average per whaling boat is estimated at 136.6 barrels per day as compared with 129.4 during the first half of February 1935.

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Several shipments of red oil have been brought into United States from the Argentine recently, it is reported, at prices a cent or two below the domestic market. A close follower of this market advises us that the quality of the low priced shipments is somewhat uncertain, and indicates that in his opinion these importations are not liable to have any very important effect on the American red oil market.

◆

The fifth annual Premium Exposition was held at the Palmer House, Chicago, during the week of May 6, in connection with the annual meeting of the Premium Advertising Association of America.



Automatic bottle washing equipment in a large modern milk plant.

GERMICIDAL DETERGENTS

By H. O. Halvorson*, Milward Bayliss*, Erling J. Ordal*, and John L. Wilson**

DURING the past few years we have been striving to find a mixture of chemicals which will act as a detergent and germicide at the same time. We believe there is a definite need for such a compound. As pointed out in a brief article by Cade and Halvorson[1], such a compound would be highly desirable in food manufacturing establishments because it would make both cleaning and sterilization possible in one operation. Where this is necessary at the present time, operators are limited to the use of caustic soda in concentrations over 3 per cent. Good results may be obtained with somewhat lower concentrations of alkali by using certain combinations of alkali and soaps[1]. There are some disadvantages connected with the use of caustic soda. In the first place, it is not very efficient as a detergent, and secondly, the high alkalinity is a handicap where hand washing is employed. It is evident that caustic soda is not practicable in restaurants or soda fountains where most of the dishes have to be washed by hand. For such places, it has been advocated[2] that two separate operations be performed—cleaning by means of a good detergent followed by sterilization with chlorine or hypochlorites. When properly controlled, this method gives good results, but the process is by no means fool-proof, and when used by laymen is likely to give unsatisfactory results. Good results can also be obtained by following the cleaning with steam sterilization, but this method is rather expensive and occasions considerable breakage of glassware.

In the survey made by Cade and Halvorson, it was pointed out that germicidal results could not be obtained by adding phenols or their derivatives to an alkaline detergent because practically all phenol derivatives lose their germicidal efficiency if the pH of the solution is much above 10. This seems to be due to the formation of sodium salts which have a much lower germicidal value than the compounds from which they are derived. During the past few years, there has been a tendency on the part of manufacturers who market detergents to recommend compounds much less alkaline than those used heretofore. There have recently been placed on the market numerous compounds, modern wetting agents[3], which have soap-like properties, and that remain soluble in solutions that are neutral or acid. It is claimed that many of these compounds maintain high detergency even in neutral or acid solutions. This indicates that our former belief that a high alkalinity was a prerequisite for detergency is probably incorrect, and that it is pos-

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sible to prepare good detergents in which the alkalinity is comparatively low. With this in mind, we have investigated the germicidal effect of phenols to determine if they might be used in conjunction with detergents having a somewhat lower alkalinity. For this purpose we selected a group of diphenols, since these are known to be more efficient germicides than the ordinary phenols. Furthermore, we placed particular emphasis upon the substituted phenols since it has been shown that their dissociation constants are generally lower than those of the phenols themselves. It is our belief that the unionized portion of the molecule is the most active in the destruction of bacteria, and it would therefore be desirable to get compounds with as low a dissociation constant as possible. We believe that the substituted phenols have less tendency to be inactivated on the alkaline side than the phenols themselves.

Most of the detergents which have been found to give good cleaning action are known to contain wetting agents in addition to the alkaline salts. For this reason, we investigated the combined effect of alkalies, diphenols, and various types of wetting agents in an attempt to find some combination which would exhibit satisfactory germicidal results and at the same time give efficient cleaning.

Germicidal tests of the various mixtures were made in accordance with the modified Reddish technique described in the article published by Cade and Halvorson. Briefly, this test was made as follows:

> Five cc. of the disinfectant to be tested were placed in a sterile test tube, which was held in a rack at an angle of approximately 30° C. in a water bath maintained at the desired temperature, ± 0.1°. When the material in the test tube had reached the same temperature (usually 15 minutes were allowed), 0.5 cc. of the broth culture was introduced. The tube was shaken to mix the contents thoroughly, and immediately placed back in the rack. At the end of the desired time interval, a sterile 4 mm. wire loop was introduced into the mixture, carefully withdrawn, and immediately introduced into a tube of molten (43-45° C.) sterile nutrient agar. This agar tube was rotated between the palms of the hands to insure uniform mixing of the subculture material. The tube was then flamed and its contents poured into a sterile petri dish. After solidifying, the plates were inverted and placed in the incubator at 37.5° C. After 48 and 72 hours, the colonies were counted and recorded. A figure of 10,000+ in the tables indicates that an exact count was impossible, but the number of colonies exceeded 10,000. Figures below 10,000, particularly those under 200, represent accurate counts of the surviving colonies.

With all tests, controls were run using standard phenol solutions. Often other solutions were also used as checks on the culture and for the purposes of comparing results obtained with different cultures. If the organism proved to be one of low resistance, or one of unusually high resistance, the data obtained with it were discarded, and the test was repeated using an organism of normal resistance.

The standard organism used for most tests was *Staphylococcus aureus* (Insecticide Board strain) and unless otherwise stated, this is the organism used in all the tests run in obtaining the data presented below.

Table I gives typical data showing the control counts obtained with phenol solutions.

Table I.

Control Counts Obtained with Phenol Solutions

Phenol Dilution (20° C.)	*Plate Counts* 5 *min.*	10 *min.*	15 *min.*
1-60	3	0	0
1-70	300	100	10
1-80	1000	500	300
Phenol Dilution (37° C.)			
1-80	10	0	0
1-90	150	10	0
1-100	500	150	50

Table II gives the effect of alkaline salts when used alone.

Table II.

Germicidal Effect of Alkaline Salts (1% carbonate solutions)*

Temp. 37° C.	*pH*	5 *min.*	10 *min.*
	7.0	10,000+	10,000+
	8.0	10,000+	10,000+
	9.0	10,000+	10,000+
	10.0	10,000+	10,000+
	11.0	10,000+	10,000+
	12.0	10,000+	5,000+

* 1% carbonate solutions were prepared by mixing various amounts of 1% Na_2CO_3 solution and 1% $NaHCO_3$ to give the desired pH. The pH was determined by using the hydrogen electrode. A small amount of 1% NaOH was mixed with 1% Na_2CO_3 solution in preparing the solution with the pH of 12.0.

Data similar to the above are obtained when phosphates or silicates in solutions of the same pH are used. It is evident that the organisms are not killed by alkali until the pH gets up toward 12.

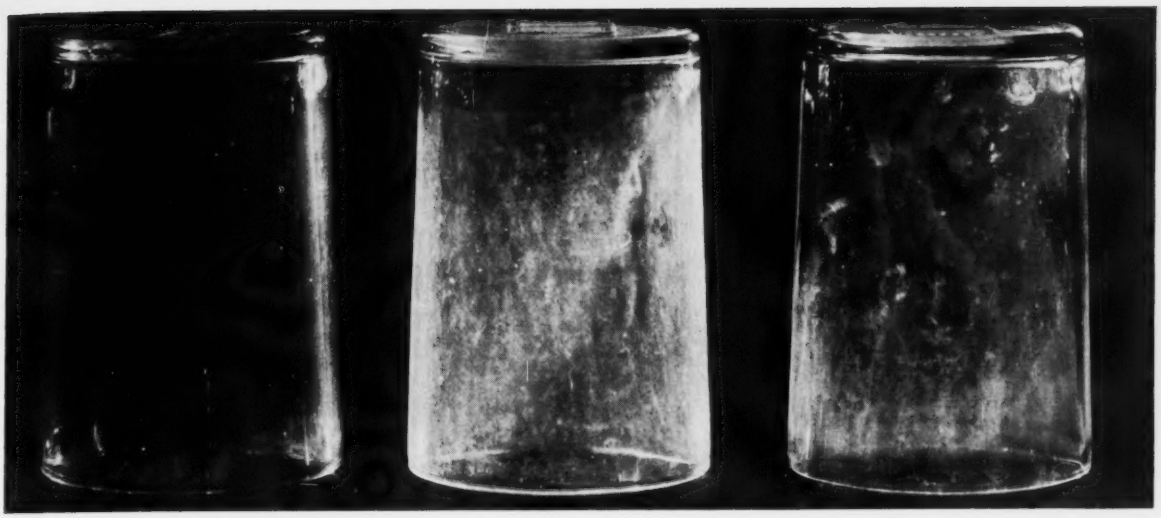
Table III gives the results with various soaps when used alone.

Table III.

Germicidal Action of Soaps

Temp. 37° C. *Concentration Per Cent*	*Soap*	*Plate Counts* 5 *min.*	10 *min.*
0.1	Sodium resinate (pH 9.0)	10,000+	10,000+
1.0	Sodium resinate (pH 9.0)	100	10
0.1	Sodium oleate	10,000+	10,000+
1.0	Sodium oleate	10,000+	10,000+
0.1	Sodium laurate	10,000+	10,000+
1.0	Sodium laurate	10,000	8,000
0.1	Sodium myristate	10,000+	10,000+
1.0	Sodium myristate	10,000+	10,000+
0.1	Sodium palmitate	10,000+	10,000+
1.0	Sodium palmitate	10,000+	10,000+
0.1	Sodium stearate	10,000+	10,000+
1.0	Sodium stearate	10,000+	10,000+
0.1	Tallow soap (pH 9.0)	10,000+	10,000+
1.0	Tallow soap (pH 9.0)	10,000+	10,000+
0.1	Cocoanut oil soap (pH 9.0)	10,000+	10,000+
1.0	Cocoanut oil soap (pH 9.0)	10,000	8,000

Thus, the only soaps which have any effect whatever are sodium resinate and sodium laurate.



Photograph I

9 Cycles with No. 488 | 9 Cycles with No. 513 | 9 Cycles with No. 527

Table IV shows the germicidal action of sodium chlororthophenyl phenolate.

Table IV.

Temp. 37° C. *Concentration Per Cent*	*Soap*	—*Plate Counts*— 5 *min.*	10 *min.*
0.01	Sodium chlororthophenyl phenolate	250	25
0.02	Sodium chlororthophenyl phenolate	0	0

Table V shows how sodium chlororthophenyl phenolate is inactivated at the higher pH values.

Table V.

Germicidal Properties of Sodium Chlororthophenyl Phenolate at Various pH Values in 1% Carbonate Solutions

Temp. 37° C. *pH*	*Concentration Per Cent*	—*Plate Counts*— 5 *min.*	10 *min.*
7.0	0.01	1,000	200
7.0	0.02	200	20
8.0	0.01	1,500	500
8.0	0.02	800	100
9.0	0.01	5,000	2,000
9.0	0.02	2,000	1,000
10.0	0.01	10,000+	10,000+
10.0	0.02	10,000+	10,000+
11.0	0.01	10,000+	10,000+
11.0	0.02	10,000+	10,000+
12.0	0.01	10,000	5,000
12.0	0.02	10,000	4,000

Other phenols, such as orthophenyl phenol, give similar results. These data show that inactivation begins at about pH 9, and becomes very marked at pH 10. The lower counts shown in this table at pH of 12.0 are probably due more to the high alkalinity than to the phenol.

Table VI shows the combined effect of phenolate, sodium resinate and carbonate buffers.

Table VI.

Germicidal Efficiency of Sodium Chlororthophenyl Phenolate and 0.1% Sodium Resinate in 1% Carbonate Solutions

Temp. 37° C. *pH*	*Concentration of Phenol Per Cent*	—*Plate Counts*— 5 *min.*	10 *min.*
7.0	0.01	200	20
7.0	0.02	0	0
8.0	0.01	200	20
8.0	0.02	0	0
9.0	0.01	200	20
9.0	0.02	0	0
10.0	0.01	1,500	500
10.0	0.02	1,000	200
11.0	0.01	1,200	500
11.0	0.02	1,200	500
12.0	0.01	1,000	400
12.0	0.02	1,000	400

We observe from these data that with phenolate and sodium resinate combined, inactivation does not begin until the pH is about 10. Good germicidal results can be obtained if the pH is anywhere below 10.

Table VII shows the effect of variation in the amount of resinate in a mixture of resinate, phenolate and carbonate buffer.

Table VII.

Effect of Varying the Amount of Sodium Resinate in the Presence of Sodium Chlororthophenyl Phenolate and 1% Carbonate Solution (pH 9.0)

Temp. 37° C. *Concentration of Sodium Resinate Per Cent*	*Concentration of Phenol Per Cent*	—*Plate Counts*— 5 *min.*	10 *min.*
0.05	0.01	1,000	200
0.05	0.02	100	20
0.01	0.01	200	20
0.01	0.02	0	0
0.02	0.01	100	2
0.02	0.02	0	0
0.05	0.01	20	0
0.05	0.02	0	0
1.00	0.01	0	0
1.00	0.02	0	0

It can be seen that good results are obtained with 0.1% or more of resinate. If the concentration is decreased much below 0.1%, the efficiency falls off.

Table VIII gives the results when other soaps were substituted for sodium resinate.

Table VIII.

Effects of Various Soaps on Phenolate and Carbonate Mixtures (1.0% Carbonates, pH 9.0)

Temp. 37° C.

Soaps	*Concentration of Phenol Per Cent*	—*Plate Counts*— 5 *min.*	10 *min.*
Sodium resinate	0.01	200	20
Sodium resinate	0.02	0	0
Sodium oleate	0.01	450	60
Sodium oleate	0.02	60	5
Sodium laurate	0.01	350	50
Sodium laurate	0.02	30	0
Sodium myristate	0.01	1,000	300
Sodium myristate	0.02	300	100
Sodium palmitate	0.01	10,000+	10,000
Sodium palmitate	0.02	7,000	1,000
Sodium stearate	0.01	10,000+	10,000
Sodium stearate	0.02	8,000	1,500
Tallow soap	0.01	550	100
Tallow soap	0.02	100	20
Cocoanut oil soap	0.01	400	50
Cocoanut oil soap	0.02	40	2

It is to be observed from these data that resinate, oleate, laurate, and commercial soaps containing oleate and laurate are the most effective. Saturated soaps such as stearate and palmitate appear to be ineffective.

Experiments such as the above indicated that, at least at pH values below 10, it is possible to obtain good germicidal results when the proper soap and phenol combination is used. It should particularly be noted that neither the phenols nor the soaps when used alone with the alkaline buffer solutions at these low pH values are effective germicidally. They do become effective, however, when used together. This principle of "synergism" or "mutual activation" has been presented more fully elsewhere[4].

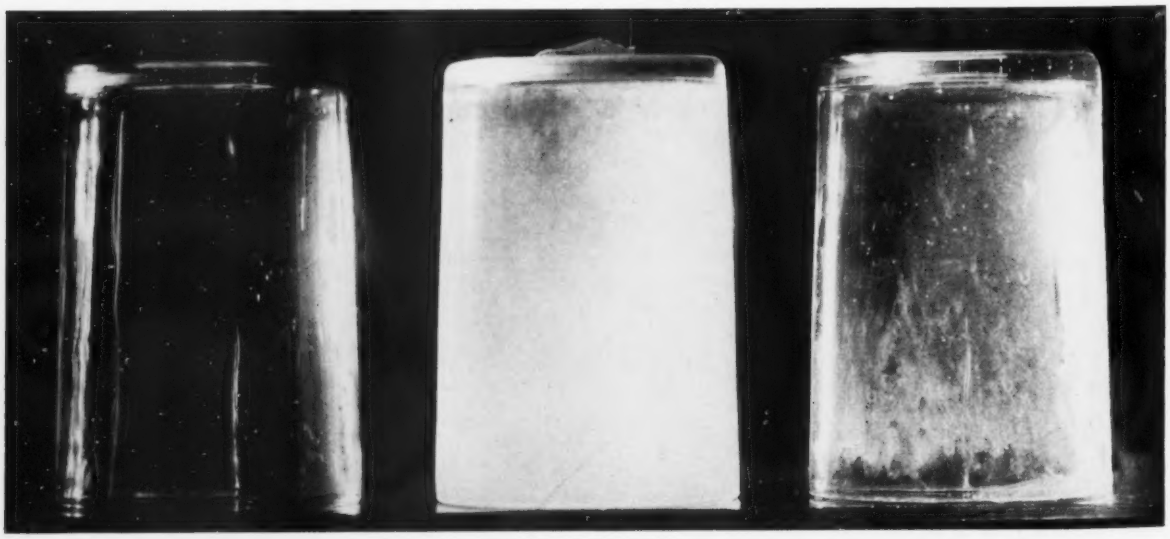
The possibilities of obtaining desired germicidal action were thus established. Two problems yet remained. First, it must be determined whether or not effective detergent action could be obtained with mixtures of chemicals which satisfied the germicidal requirements. Second, if such mixes were found their germicidal activity should be studied on a wide variety of micro-organisms.

THE need for a germicidal detergent is especially urgent in the field of hand dishwashing. Therefore, this detergent study has been undertaken with this fact in mind and most of the experimental work has been directed toward that need. It is believed, however, that many other fields of usefulness for such a product exist and that what will serve best in this field will, with perhaps slight modifications, prove useful in other fields as well.

There are no well established standards of detergency in this field of dishwashing, and quantitative measurements are not easy to make. However, the differences in the final results obtained by repeated washings with different solutions is frequently so outstanding as to be unmistakable to even a casual observation. Such results can be recorded, qualitatively at least, by photographing the objects washed.

As already indicated, it was believed that in general a good detergent solution must have good wetting and emulsifying properties[5, 6]. These properties may be due principally to ingredients added for that specific purpose, or in some cases may be due to products formed in the washing process itself. For instance, alkaline solutions may react with fatty acids present in, or formed from, the soil to form soaps which serve to increase the detergency of the washing solution considerably[7]. At the rather low alkalinity desired here for germicidal reasons, the saponification action would not be very great under the conditions of use. Furthermore, frequently the soil present does not furnish material for the formation of good wetting agents. Hence it is desirable for our purposes from the detergent stand-

(*Turn to Page* 109)



Photograph II

25 Cycles with No. 488 | 14 Cycles with No. 513 | 25 Cycles with No. 527

A Soap Market Analyzed

AN analysis of the soap buying habits of a large urban community shows a continued increase in toilet soap consumption, a greater demand for packaged soap chips and flakes, fewer families using white bar laundry soaps and scouring powders, and a general trend on the part of consumers to spread their buying over a larger number of brands. These facts, along with a shuffling about of various brands in their relative positions in the market, were shown by the 1935 Consumer Analysis of the Greater Milwaukee Market, made recently by *The Milwaukee Journal*. This survey of consumer buying habits is made annually by this well-known newspaper. Owing to a revision in classification of some products in the general soap and cleanser group, all 1935 figures are not comparable with previous years. The salient facts on soap products as brought out in the analysis have been extracted from the report.

An increase in the amount of toilet soap consumed per Milwaukee family was noted in the figures of January, 1935, although the number of users of toilet soap dropped one per cent from 1934. The increase in volume per family was approximately seven cakes per year, from 65.7 cakes as of January, 1934, to 72.5 as of January of this year. This year, 86 brands were bought as compared to 78 brands last year. Lux Toilet Soap led the market survey this year with 29 per cent of the total families, moving up from third place last year when it accounted for 21.6 per cent. Palmolive remained in second place with 24.3 per cent this year, while Lifebuoy dropped from top to third place with 24.3 per cent as of January, 1935. Fourth place went to Camay with 12.4 per cent. The following table shows the percentage of familes using each brand as of January, 1931, 1934, and 1935. (Where the figure was less than one per cent, a blank appears.)

	1935	1934	1931
Lux Toilet	29.0	21.6	23.3
Palmolive	26.2	22.5	35.5
Lifebuoy	24.3	29.5	24.2
Camay	12.4	9.2	5.5
Ivory	11.8	12.7	12.3
Gimbel's Hardwater	3.4	5.3	2.6
Woodbury's	2.4	1.3	——
Schuster's Hardwater	1.3	1.0	——
Coleo	1.0	——	——
Boston Store Hardwater	1.0	1.8	——
Miscellaneous	5.6	6.3	11.5

An increase in the consumption of packaged soap chips was reported for January, 1935, over 1934. The increase was about six per cent and was made apparently at the expense of bulk chip. Some 82.3 per cent of all families were buying packages chips this year as against 77.5 last year. This year, 72 brands of packaged chips were on sale. The leading seller is a local product, John Hanser, which is used by 38 per cent of all families. It also was the leader last year with 36.5 per cent. Lux flake is next this year with 25.6 per cent, followed by Chipso at 14.9, and Clean Quick at 10.4. The following table shows percentage of families according to soap chip consumption. (Figures of less than 1 per cent omitted.)

	1935	1934	1931
John Hanser	38.0	36.5	——
Lux Flakes	25.6	19.5	22.0
Chipso	14.9	20.0	46.4
Clean Quick	10.4	11.8	——
Ivory Chip	8.7	7.0	22.9
Crystal White	3.2	2.6	——
Fom	3.1	——	——
Al Hanser	2.8	——	——
Schuster White World	1.9	1.5	——
Wash Rite	1.3	1.9	——
American Family	1.3	1.1	11.1
Automatic	1.2	2.1	1.7
Miscellaneous	5.2	6.9	11.3

While yellow laundry soaps showed a material increase as of January, 1935, over last year, users of white laundry soaps declined again. In the case of yellow soap, the increase was in the number of families and also in the consumption per family, the latter figure going to 68 bars from 60.1 for the previous year. Fels Naptha continued to lead this market. The downward trend in white laundry bars was in the number of families only, the consumption per family jumping to 72.5 this year as compared with the low ebb of 1934, 66.4 bars per family. The inference is made that users of white bar soap continue to shift steadily to chips, granules powders, etc. At the same time, the total tonnage consumption of white laundry soap does not appear to suffer materially. P. & G. White continued to lead this market. Others are shown according to percentage of families using them in the following tables:

YELLOW LAUNDRY BAR SOAP

	1935	1929	1928
Fels Naphtha	65.0	67.4	59.0
O. K.	18.5	——	——
American Family	6.3	8.7	10.2
Hanser's	4.8	——	——
Star	4.7	23.7	30.3
Miscellaneous	3.1	1.4	1.2

WHITE LAUNDRY BAR SOAP

	1935	1929	1928
P. & G.	52.9	56.9	52.9
Crystal White	27.5	18.8	21.1
Ivory	13.9	7.2	6.3
Kirk's	2.8	15.2	16.7
Hanser's	2.1	——	——
Miscellaneous	3.4	3.5	5.6

A continuation of the decline in the number of families using those products classified as washing powders was noted in the 1935 survey of the Milwaukee market, only 9.6 per cent stating that they now use these products. At

the same time, the number of brands sold showed an increase this year to 44. Gold Dust continues to dominate the market as it has for some years past. The percentage of familes using each brand in 1935, 1929, and 1928, is shown herewith:

	1935	1929	1928
Gold Dust	69.2	55.5	56.4
Johnson's	5.6	9.3	8.5
Superior	5.6	——	——
Star	3.6	11.6	11.9
Hanser	2.5	——	——
Watkins'	2.0	——	——
Kao	1.7	——	——
Pride	1.4	——	——
I. G. A.	1.0	——	——
Lighthouse	1.0	——	——
Miscellaneous	8.0	25.8	26.1

Although the number of brands of scouring powders on the Milwaukee market increased from 35 to 43 this year, the percentage of families reported using these cleansers dropped to 90.1 per cent as against 95.7 in 1934. These figures include only packaged scouring cleansers in sifter top cans. Kitchen Klenzer continued to lead in this market as the following figures show:

	1935	1934	1931
Kitchen Klenzer	44.9	51.2	53.0
Old Dutch	21.8	19.8	18.9
Sunbrite	12.9	9.5	13.9
Gold Dust	8.5	8.1	3.5
Bon Ami	5.0	4.2	5.6
Bab-O	3.8	3.7	6.2
Lighthouse	3.8	4.0	——
Brite-ize	1.2	——	——
Miscellaneous	1.8	2.2	2.3

Granulated, powdered, and shredded soap products, packaged and sold under brand names, have been classified separately in the survey this year. In previous years, they were included in the general category of cleansing powders. Rinso led this group in the 1935 survey with 69.2 per cent of all families. Percentage of families using each product follows:

Rinso	69.2
Oxydol	50.8
Super Suds	26.2
Palmolive Beads	20.8
Ivory Snow	5.5
Chipso Granules	3.0
Miscellaneous	2.2

Under soap crystals and water softeners,—"combinations of straight soap and other chemicals," the survey gave the following percentage of families figures:

Climalene	56.2
No Name	8.5
Magnetic	6.9
4-M	6.4
Lite	5.1
Rex	3.7
Lazy Man's Cleaner	2.7
Melo	2.0
Olo	1.9
Steinmeyer's	1.6
Leland	1.0
Miscellaneous	7.4

NEW SOAP CODE INTERPRETATIONS

The following interpretations under the Code of the Soap and Glycerine Industry have been made by the Code Authority and approved by the NRA for publication. Further information may be secured by communicating with R. C. Edlund, executive secretary of the Code Authority, 381 Fourth Avenue, New York. The interpretations herewith are the latest ones to be released, all prior interpretations having been published in previous issues of SOAP as they have been released.

Facts: In the sale of our soap products we employ a number of persons as coupon distributors. Our practice is to send a crew manager into a town and he engages a number of local persons, usually women, to go from house to house and distribute coupons which are redeemable at local grocery stores as part of the purchase price of our products. These coupon distributors are then given a territory in which to work and are left by the crew manager to distribute the coupons. The crew manager has very little opportunity to check up on the time put in by these coupon distributors. Generally speaking, however, they work from about 10:00 A. M. in the morning until about 3:30 P. M. in the afternoon and, with time off for lunch, average about five hours per day.

Question: What is the minimum wage coupon distributors must be paid? Do they come under any of the special classes in the Code, such as learners or apprentices, light tasks, junior workers, etc.?

Answer: The minimum wage for such employees is 40c per hour, or in southern states 35c per hour. Such employees do not fall within the special classes of learners, apprentices, junior workers, or employees engaged in light tasks.

Question: Can an employee be compensated for overtime by equivalent time off?

Answer: No. If any employee on an hourly rate of pay works in excess of eight (8) hours in any twenty-four (24) hour period or in excess of forty (40) hours in any calendar week, the wage paid for excess hours shall not be less than one and one-third (1⅓) the regular hourly rate. Accordingly, no overtime worked by such employees may be compensated for by the equivalent time off.

Facts: In our plant we have some employees whose duties are to keep both the buildings and machinery in proper working condition. All of them work on a regular schedule of 40 hours per week. Sometimes during emergencies they work more than 40 hours in a week.

Question: Are all maintenance employees, who sometimes do emergency maintenance and repair work, permitted to work unlimited hours under the Code?

Answer: No. Maintenance or other employees, who during an emergency may do maintenance and repair work, may work unlimited hours only during the time they are actually engaged in maintenance and repair work of an emergency nature. Employees who are regularly engaged on maintenance work may work not to exceed an average of 40 hours per week in a six months' period. The time they work in doing emergency maintenance and repair work is not to be counted in averaging their hours over a six months' period.

Facts: The Code permits us to work truck drivers an average of 44 hours per week in a six months' period but not in excess of 48 hours in any calendar week. It also states that such employees shall be paid not less than $15.00 per week in cities of over 500,000 population, or in the immediate trade area thereof, or $14.00 per week elsewhere.

Question: Must truck drivers and the others described in Article III, A, 4 of the Code be paid overtime for the hours they work in excess of 40 per week?

Answer: When the employees described are paid an hourly rate, they must be paid time and one-third for every hour they work in excess of 8 hours in any 24 hour period or in excess of 40 hours in any calendar week. When such employees are paid a weekly salary (which must be not less than the amounts fixed by Article IV, A, 3 of the Code), the Code does not require overtime payment.

Facts: Our engineer's regular working schedule is 48 hours per week. It happens, however, that in some weeks he works less than 48 hours and in other weeks he may work 50 or 52 hours. Over a six months' Code reporting period, however, his hours are held strictly within 48 a week.

Question: May an employer average the working hours of an engineer over a six months' Code reporting period?

Answer: No. As the Code does not permit an engineer to work in excess of 48 hours in a week, his hours may not be averaged over a six months' period. The limitation on hours applies regardless of the method of compensating the employee for his services.

Facts: In checking over our employment records, we find that during the first six months of operation under the Soap and Glycerine Code some of our employees did not work the maximum permitted by the Code. As we have been required by the Code Authority to reduce the hours of employees whose total hours exceeded the maximum in the first six months' period so that the average for both the first and the second periods will not exceed the Code maximum, we are wondering whether or not it is permissible to allow those employees whose hours were less than the Code maximum in the first period to work extra hours in the second period so that their average for both periods will be the equivalent of the Code maximum.

Question: May employees whose total hours in the first six months' period were less than the Code maximum make up this lost time in the second six months' period by working above the Code maximum a number of hours equal to the lost hours in the first period?

Answer: No, an employee may not work or be permitted to work in excess of the Code maximum during any six months' period. "Six months' period" wherever used in the Code means the 26 weeks from Monday, November 13, 1933 (the date the Code became effective), to Sunday, May 13, 1934, inclusive; then the 26 weeks from Monday, May 14, 1934, to Sunday, November 11, 1934; then the 26 weeks from Monday, November 12, 1934, to Sunday, May 12, 1935, and so on, during the life of the Code.

Facts: A firm purchases soap from soap manufacturers and adds to it advertising matter or pictures by means of a secret process. The firm does not change the size, the shape or the ingredients of the soap in any manner whatsoever except by the addition of the above mentioned processed material. After the pictures are added however, the firm does package the soap.

Question: Is this firm subject to the Code of Fair Competition for the Soap and Glycerine Manufacturing Industry?

Answer: Yes.

Facts: In drying soap chips, we employ six highly skilled workers each of whom has been working 48 hours per week. The drying machine, which is of the Proctor & Schwartz type, operates 24 hours per day for six days of the week and the time of these six skilled workers is arranged so that they work in three shifts of two men each. Operators of these machines require a considerable amount of experience and also knowledge of special conditions which may affect the drying operations. To turn out a satisfactory product, they must be able to determine the effect that the atmospheric moisture will have on the soap passing through the machine. It would work a real hardship in our case if it became necessary to train new employees to operate these machines due to the time required for training and the knowledge and experience needed to be an efficient operator. All of these operators are paid less than $35 per week.

Question: Doesn't the Code permit us to work experienced operators of soap chip drying machines 48 hours per week on the theory that they are highly skilled workers engaged in continuous processes where restriction of hours would unavoidably reduce production?

Answer: No, the occupation of operating a soap chip drier is not that of a highly skilled worker in a continuous process where restriction of hours would unavoidably reduce production, within the meaning of Article III-A-2 of the Soap and Glycerine Code and it would, therefore, not be proper either to require or to permit such operators to work 48 hours per week unless their hours during any six months' Code reporting period are brought down so that the average will not exceed 40 hours per week. Operators on an hourly rate of pay who work in excess of eight hours in any 24-hour period, or in excess of 40 hours in any calendar week, must be paid for the excess hours not less than one and one-third the regular hourly rate.

Facts: It has been necessary for us to work some of our employees over-time on the installation of new equipment, in dismantling machinery for transfer to other locations in our plant, and also in making necessary repairs to machinery which has broken down during operation.

Question: In computing the hours worked by the employees engaged in the operations mentioned, are we correct in regarding them as being engaged on "emergency maintenance and repair work" within the meaning of Article III, A, 1, of the Code?

Answer: The installation of new equipment and the dismantling of machinery for transfer to other locations in the plant are not emergency maintenance and repair work within the meaning of the Soap and Glycerine Code.

Facts: An employee operates a filling machine by feeding boxes into the machine, which opens and forms the box automatically, then seals the bottoms and runs the boxes over to the scales, where they are filled with the product, and then through the top sealer. The boxes are then ready for the wrapping machine. This employee regularly checks the weight and watches each operation, keeps glue supplied and cleans, oils, adjusts and cares for the machine. Usually, one employee operates two machines at the same time.

Question: May the employee described above be paid the minimum wage provided by Article IV, Paragraph A, Section 2 of the Code of Fair Competition for the Soap and Glycerine Manufacturing Industry, on the theory that he is engaged in the light task of wrapping, packaging and filling?

Answer: No.

Facts: An employee attends a wrapping machine, keeps the inside and outside wrapper bins and glue pots filled, inspects the finished product for imperfections, and adjusts, oils and cares for his machine, as well as more or less supervises the entire process of pressing and wrapping.

Question: May the employee described above be paid the minimum wage provided by Article IV, A, 2, of the Code of Fair Competition for the Soap and Glycerine Manufacturing Industry, on the theory that he is engaged in the light tasks of wrapping, packaging and filling?

Answer: No. An employee who "adjusts, oils, and cares for his machine, as well as more or less supervises the entire process of pressing and wrapping" is not engaged in "the light tasks of wrapping, packaging and filling" within the meaning of the Article IV, A, 2 of the Code. The minimum wage allowable under the Code for such employee is 40 cents an hour, except in the South where it is 35 cents an hour.

Facts: We have established the practice of giving our regular factory employees a vacation of one week each

(*Turn to Page* 57)

New Products



A new type of container for powdered cleansers and other powdered materials with semi-perforated sifter top so designed that the content gravitates toward the perforations. Fibre can with metal top and bottom by the Canister Company of Phillipsburg, N. J.

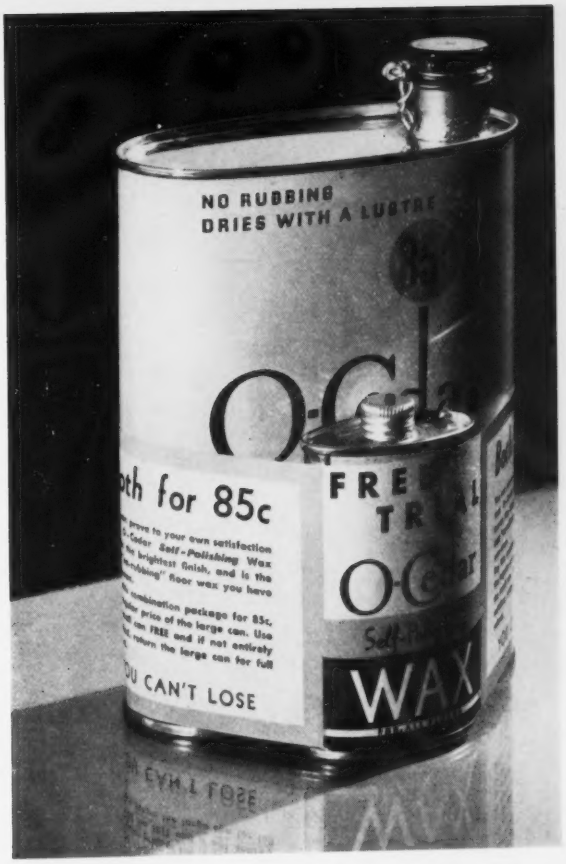


A latherless shaving cream which is attracting considerable attention. Packaged in a pale green "turret" tube which is contained in a carton of silver, white and black. Product manufactured by Allyn, Inc., of Cambridge, Mass.



The uniform label design adapted for the family of packages by the Creco Company of Long Island City, N. Y. Here are shown five of a line of fifteen or sixteen small package items on which the same type label and color combination are used throughout.

and Packages



Latest combination in packages for self-polishing wax by the O'Cedar Corporation of Chicago,—the same idea as used with considerable success in the case of their cream furniture polish.



A new and very handsome container for a powdered rug shampoo. The color combination is light blue and silver with a black metal cap. The product is manufactured by Arwell, Inc., of Waukegan, Illinois.

◆



Three strikingly designed lithographed cans in bright and attractive colors for three new liquid insecticides. Socko is made by the Robert C. White Co., Philadelphia; Sure Dead by Double B Products Co., Hartford, Conn.; Bug-a-Boo by Standard Oil Co. of N. Y. Containers by American Can Company.

SOAP PERFUME SPECIALS
by SOAP PERFUME SPECIALISTS

Will 60 or 75 cents perfume 100 pounds of toilet soap? It will, *if* your perfume has been *specially* made by perfumers who have made a lifetime study of soap.

We have built up an entire department along those lines and invite your inquiries.

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Price range on above oils $1.50 to $4.00 per lb. All give adequate perfume results in ¼% to 1% strength.

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Factory, Elizabeth, N. J.

FTC COMPLAINT AGAINST SOAP FIRM

Victor Soap Co., Dayton, Ohio, is charged with sales misrepresentations and unfair competition in a complaint issued by the Federal Trade Commission. The FTC alleges that the Dayton concern in selling its products through jobbers, retailers and house-to-house canvassers, advertised for dealers and purchasers under the pretense of seeking agents. The FTC complaint also states that the soap concern guaranteed successful sales campaigns for individual agents, that its salesmen made from $50 to $60 a week with ease, and that the company furnished everything necessary for this work. Alleging that these claims are untrue, the FTC has given the Victor Soap Co. until May 24 to show cause why an order to cease and desist should not be issued.

PASS NEW MAINE COSMETIC LAW

A new cosmetic law has been enacted by the Maine legislature supplanting the much debated legislation which caused manufacturers of toilet preparations so much grief last year until it was invalidated by a Federal injunction. The new law specifically exempts soaps from the cosmetic classification unless they are represented as preparations for the treatment of disease. It does not require submission of formulas, nor is it necessary to obtain separate permits for variations of the same product. Registration is still obligatory, however, with the registration cost 50c for each sample, and unregistered products cannot be sold in the state. The Department of Health is authorized to refuse registration to any preparation which in its judgment contains injurious substances in dangerous amounts.

German soap manufacturers are currently complaining of lack of orders, where last fall they could scarcely supply the current demand. During the fall of 1934, after Dr. Schact, the Acting Minister of Economy, had taken steps to control the imports of greases, fats and other raw materials essential to soap manufacturers, housewives generally, fearing scarcity and higher prices, laid in large quantities of soaps, covering their needs for a long time. This anticipation of demand explains the present slackness of sales. The failure of foreign wholesale buyers to place the usual large orders for soap and soap products has intensified the present plight of the industry. Only the manufacturers of high priced luxury soaps report more satisfactory business, as for obvious reasons there was little hoarding of such goods during the housewives' panic in the fall of 1934.

A. J. O'Leary has been appointed assistant to general manager of sales at Lukens Steel Co., Coatesville, Pa. Prior to joining the Lukens organization in 1916, he was with the Pennsylvania Railroad and Alan Wood Steel Co. O'Leary spent five years in the mills and mill service departments at Lukens before he was transferred to the sales department, where he has served since 1931.

LEVER PROFITS RECORD IN 1934

Presiding at the 41st annual meeting of Lever Brothers, Ltd., recently held at Port Sunlight, England, Francis D'Arcy Cooper, chairman, introduced an interesting novelty, large-scale illuminated diagrams which illustrated by symbols the progress of the company between 1910 and 1934. A series of mannequin figures showed a contrast between the number of stockholders—8,643 in 1910, and 173,000 in 1934. Share capital increased from £6,220,458 ($31,102,290) to £59,369,584 ($296,847,920). Profits advanced from £637,329 ($3,186,645) to £6,568,844 ($32,844,220), the largest profit in the 41 years history of Lever Brothers as a public company.

During the past 35 years, Mr. Cooper stated, the percentage of the soap trade in the hands of the Lever organization in the British Isles had increased from 26 to 62 per cent, the money value of soap sales had increased eight times, the amount spent on employees' welfare had multiplied over 10 times, the number of factories had grown from 20 to 118, while during King George's reign the number of countries in which the company had factories operating had risen from 12 to 28.

He said that the total tonnage of soap produced by Lever during 1934 was 2,159,000 tons, an increase of 66,000 tons. The monetary value of the turnover was £57,694,705 ($288,473,525). Outside the United Kingdom, sales of soap showed a small decrease, which was not surprising under prevailing conditions.

"For the second year in succession," he said, "I am in the happy position of reporting an increase in the total sale of soaps in the domestic market. Last year there was a gain of 2.6 per cent. This year there is a further gain which, though small, enables us to record the highest sales level during the existence of the company. Rinso, Vim, and Persil have made new records, and toilet soaps have exceeded their 1933 record by 22,500,000 tablets.

"The advance in the sale of toilet soaps is due to the development of our proprietary articles. The greatest success was achieved by Pears' Transparent Soap, the sales of which have more than doubled the sales of 1933. To cater for that section of the public to whom price is a first consideration our associated company, Joseph Watson & Sons, Ltd., introduced a new toilet soap—'Eve.'

"Overseas—India, Siam, South Africa, Australia, New Zealand, the Argentine, Brazil, and the export trade all show improvements, but China, Canada and our West African soap company show reductions. In U. S. A., although dollar profits have been maintained, the previous year's results included the benefit of remittances to England before the dollar was devalued; hence this year the sterling equivalent of the contribution to our profits is considerably less. The total profits from overseas companies, excluding the Continent and Belgian Congo, were £1,924,395 ($9,621,975), against £2,151,502 ($10,757,510) last year.

"We have had a setback of about £200,000 in the results of our whaling company. This fall is due to two

circumstances—the first that one of our two floating factories was out of action during the greater part of the 1933-34 season; the second, a provision for the loss resulting from the disappointing catch for the 1934-35 season.

"The United Africa Company has done well. There is no question that conditions on the Coast are better, and I hope that in 1935 and subsequent years the United Africa Co. will contribute largely to our profits. On the other hand, the results obtained by the Congo Company continued unsatisfactory."

P. & G. 1st QUARTER NET 60c SHARE

For the quarter ended March 31, the Procter & Gamble Co. and subsidiaries reported a profit of $5,250,443 after depreciation, Federal taxes and other charges. After setting aside $1,200,000 for materials and products price equalization, there was a net profit of $4,050,443 available for dividends, equal after dividend requirements on the 8 per cent and 5 per cent preferred stocks, to 60c a share on 6,325,087 no par shares of common stock. This compares with a net profit of $3,458,561, or 50c a common share, in the preceding quarter, when $1,965,000 was set aside from earnings to offset possible future inventory losses. For the March quarter of 1934 the net profit was $4,031,841, equal to 59c a share on 6,410,000 common shares.

For the nine months ended with March, net profit, based on the company's quarterly reports, was $11,594,465 after Federal taxes and other charges, and after the deduction of $3,165,000 for materials and products price equalization, equal to $1.71 a share on 6,325,087 common shares. In the corresponding period of the previous year the net profit of $11,139,358 equaled $1.62 a share on 6,410,000 common shares.

Pompeian Company, Bloomfield, N. J., cosmetics, has appointed Topping & Lloyd, Inc., New York agency, to handle its advertising. The company is planning intensified advertising and sales activity.

Alvin E. Smith, sales manager of George Silver Import Co., New York, has recently been named vice-president of the company. George Silver Import Co. represents Etablissements Roure Bertrand Fils and Justin Dupont, of Paris and Grasse, France, in the United States.

The index of employment in the soap industry stood at 103.3 in March, 1935, as compared with 102.1 in February and 103.1 in March, 1934. The pay-roll index for March, 1935, registered 95.9, as compared with 94.3 in February and 88.4 in March, 1934.

One of our readers is interested in locating Jean Cassell, formerly soap maker for Engelite Products Co., New York. Information as to his present whereabouts sent to the editors of SOAP will be appreciated.

CHICAGO TRADE NOTES

THE first tournament of the Golf Auxiliary of the Chicago Drug and Chemical and Chicago Perfumery, Soap and Extract Associations will take place May 21 at the Bunker Hill Country Club.

A. K. Finkelstein, treasurer of the Chicago Sanitary Products Co., was seriously burned about the face and hands April 18 when a steam kettle exploded spraying him with hot wax. Although it is thought that Mr. Finkelstein will not suffer any permanent injury, it will be some time before he can be on the job again.

The offices of the Chicago Sanitary Products Co. were burglarized April 19. The burglar ransacked the safe and files of the company in search for cash.

The April 23 meeting of the Chicago Perfumery, Soap and Extract Association heard Walter S. Underwood of Scott, McLeish and Falk give a talk on the Personal Property Tax Problem. Mr. Underwood recently served on a committee appointed by the Chicago Tax Club to work out equitable means of assessing personal property. Mr. Underwood was able to give the members constructive suggestions for handling their particular problems. George Wrisley made some important announcements regarding code and legislative matters. The members planned their gala party which was held May 8 as the annual Informal Spring Party at the College Inn. J. H. Helfrich, president, and George Wrisley, chairman of legislative committee, will represent the association at the Convention of the Entire Toilet Goods Industry to be held May 21-23 at the Plaza Hotel, New York. It is expected that other members will also attend.

The annual Spring Dinner Dance of the Chicago Drug and Chemical Association at the Lake Short Athletic Club was voted an outstanding success. More than two hundred and fifty were on hand to enjoy the dinner, dancing and entertainment and to see the inauguration of the newly elected officers. Mr. M. B. Zimmer of Fritzsche Brothers, retiring president, was presented with a Philco Radio as an expression of thanks for his work of the past year. The next meeting will be held in September.

Chicago Sanitary Products Co., Chicago, have recently published an attractive catalog describing fifty of their most popular products. Prices are also given for each product. An interesting feature of the catalog is the space devoted to recommendations for the proper treatment for preserving eleven different types of flooring material.

Krane Products Co., New York, is now offering its "Krane's Milk of Magnesia" tooth paste in a new helmet-top package.

ATTACK YARDLEY PRICE MAINTENANCE

Unfair competition in the maintenance of a resale price plan is alleged in a Federal Trade Commission complaint against Yardley & Co., of New York, manufacturer of soaps and toilet preparations. The complaint says that Yardley furnishes customers with list prices of each product, the full and the minimum retail price, and announces that it has determined to inaugurate a policy of controlling prices and will select as customers only those who adhere. May 24 has been designated for Yardley to show cause why an order to cease and desist should not be issued.

Among other methods of resale price maintenance alleged are the seeking of cooperation from customers in reporting names of other customers who sell below the minimum suggested prices; the listing of customers to whom Yardley goods are not to be sold because they have not observed the company's prices, and the cutting off of dealers who refuse to give assurance that they will maintain prices, or who have been reported by competitors as having sold Yardley products at prices less than those fixed. The complaint says that these practices result in constraining wholesalers and retailers to resell at uniform prices so that price competition among them is destroyed.

T. M. SAYMAN COMPANY FINED $1,000

T. M. Sayman Products Co., St. Louis, of which the widely-known T. M. Sayman is head, was fined $1,000 recently for violation of the Federal Food and Drugs Act, according to a report from the Food & Drug Administration of the Department of Agriculture. The Administration stated that the Sayman firm shipped in interstate commerce its Vegetable Wonder Soap, its Healing Salve, and its Liniment, all of which were falsely labeled. The company did not contest the allegations of the Government. The report which terms T. M. Sayman "a self-styled herb doctor" who made a fortune commercializing a common plant of the American Southwest, called soaproot or "Spanish bayonet," stated that he paid the fine in one and two-dollar bills.

Sales of "Palmolive" soap during 1934 increased approximately one hundred million bars over the 1933 total, according to figures just released by the company. That this increase was carried over into 1935 is indicated by the fact that March, 1935, is reported to be the biggest month Colgate-Palmolive-Peet Co. has had since September, 1932. The company has recently announced another consumer contest, the latest one carrying an award of a 1935 Packard sedan or $1,000 in cash each week to the writer of the best letter telling "Why I like Super Suds." The company's new serial radio broadcast, "The House of Glass," will carry news of the contest each week. Another contest started several weeks ago offers 20 free tours of Europe for the best letters on "Palmolive" soap.

TOILET GOODS MEETING MAY 21-23

An all-industry convention of the perfume and cosmetic industry is scheduled for the Hotel Plaza, New York, May 21, 22 and 23, taking the place this year of the annual meeting of the Associated Manufacturers of Toilet Articles. The meeting will be open to all interested in these industries, regardless of association affiliations. Among the foremost topics to be discussed will be the subject of state and federal taxes and other legislation harmful to the industry. Plans will be made to meet this growing tax threat through proper organization and educational work among legislators.

Charles S. Welch, secretary of the code authority for the industry, has been named chairman of the business program for the meeting, and Charles Kelly of Hagerty Bros., New York, will be in charge of entertainment. Features on the program will include a theatre party the evening of May 21, with "Thumbs Up," one of the musical hits of the season, being the show chosen. This will be followed by a supper dance at the hotel. On Wednesday, May 22, an all-industry golf tournament will be held over the Long Island course of the Winged Foot Golf Club. A bridge tournament is scheduled for the ladies at the hotel that same afternoon, and the evening will be left open. On Thursday evening, May 23, the convention will close with the annual banquet, at which a distinguished guest speaker will address the body. This will be held at the Plaza.

Coupon books admitting the holder to the complete round of convention events, including the daily luncheons, may be obtained at $25 from W. C. Young, 130 West 42nd St., New York. Separate tickets can also be had to most of the events.

A paper dealing with the effect of light on the development of rancidity in soap chips and other products was presented by Willard L. Morgan at the recent meeting of the American Chemical Society in New York. Mr. Morgan found that blue and invisible ultraviolet light materially accelerates the development of rancidity in such materials as potato chips, crackers, cakes, butter, candies, nuts, and soaps, whereas other visible light such as red and yellow has very little effect. Consequently rancidity-retarding wrappers may be of any visible color except blue. Highly protective yellow transparent cellulose films have been developed and utilized for food packaging for about a year.

Nu-Blu Manufacturing Co., Seattle, Wash., announces that R. C. Earnest is no longer associated with the company and has no authority to represent them.

A small alkali plant is shortly to be established in Sagua la Grande, Cuba, according to the U. S. Dept. of Commerce.

The Cleveland office of Cowles Detergent Co. was moved April 20 to 10525 Carnegie Ave.

FRITZSCHE SERVICE UNIMPAIRED BY HALF MILLION DOLLAR BLAZE IN NEW YORK HEADQUARTERS



Most of Stocks Saved. New Laboratory Already Established. All Records and Precious Formulae Intact

First newspaper accounts of the spectacular blaze which swept the Fritzsche establishment in the early hours of March 27th proved greatly exaggerated so far as effects on operation of the Fritzsche business were concerned.

Fritzsche's valuable records were not even threatened; nor their extensive stocks of oils, aromatics and other raw materials stored in cellars and subcellars where the fire did not penetrate.

Investigation revealed that the chief damage was to a portion of the general offices and the working laboratory. Even before the ruins ceased smoking, however, adequate space in an adjoining building had been secured, and before the day ended new shelving was being erected and new equipment arriving. Some orders were shipped the following day.

Within a week of the fire routine orders were being rapidly filled and only some of those items produced by lengthy and intricate processes were more than slightly delayed. Some new machinery and equipment were required. Certain raw materials had to be manufactured. But these were difficulties which needed only a little time to overcome.

Each day found Fritzsche Brothers, Inc. nearer to a complete resumption of the prompt and efficient service to which this firm has been dedicated throughout its 65 years of existence. This astounding recovery is a signal tribute to the loyal and efficient organization which made it possible.

To the trade, Fritzsche Brothers, Inc. wishes to express its keen appreciation for their many sincere offers of assistance and extends thanks to those it serves for the forbearance shown during the brief period of inconvenience and reconstruction.



FRITZSCHE Brothers, inc.

164 SO. CENTRAL AVENUE, LOS ANGELES, CAL.

Proprietors of PARFUMERIES de SEILLANS, Seillans, France
FRITZSCHE BROTHERS, of Canada, Ltd., 77-79 Jarvis St., Toronto, Canada

78-84 BEEKMAN STREET
NEW YORK, N. Y.
118 WEST OHIO ST. CHICAGO, ILL.

PERSONAL AND IMPERSONAL

Barnes-Noble Co., manufacturer of "Brite-ize" cleanser, formerly located in Minneapolis, has moved its plant to Ottawa, Ill., where it is operating at 1117 Champlain St.

◆

Ridgways, Inc., United States sales agents for "Ammo" washing powder and "Skour-Pak" steel wool brush, moved May 1 to new and larger quarters at 230 West St., New York. The company intends to increase its sales staff and launch an intensive advertising campaign which will include close merchandising co-operation with dealers.

◆

Billy B. Van, president of Pine Tree Products Co., Newport, N. H., will return to the stage for a short engagement this summer in the Shubert revival of "Sunny Days," taking his old role in this production. Billy B. Van spent over forty years on the stage before starting in the soap business and was a well-known theatrical figure. He says that his summer engagement will in no way interfere with his activities with Pine Tree Products Co.

◆

Colgate-Palmolive-Peet Co. of Canada has recently added to its staff Leonard V. Dare, formerly manager of Champlain Drugs, Ltd.

◆

Manhattan Soap Co., New York, has opened a district sales office in Detroit at 1931 Howard St. in charge of George B. Polosky. Mr. Polosky formerly represented Publ Products Co. in Detroit.

◆

Grafton Perkins, advertising manager of Lever Bros. Co., Cambridge, Mass., says there are now some 300 imitations of "Lifebuoy" soap on the market, featuring the carbolic odor and the red color which "Lifebuoy" first introduced to the American market forty years ago.

◆

Mennen Co., Newark, N. J., has recently inaugurated a radio news broadcast over station WOR, Newark, and a sports broadcast over station WLW, Cincinnati.

◆

Frederick Stearns & Co. have placed L. E. Wicklum in charge of their sales office in Toronto, Canada. Mr. Wicklum formerly represented Stearns in Western Ontario.

◆

Unfair representations in the sale of a rug cleaner or shampoo under the trade names "Hotelo" and "De-Novo" will be abandoned by James B. McComb, New York, who has entered into a stipulation with the Federal Trade Commission. McComb agrees to cease advertising to the effect that, because his products are made by a patented formula, they have a background of authority and a standing before Government chemists. He will also stop representing in effect that the product is "OK'd by Uncle Sam" or that the formula is protected by regular Government inspection, and that because the application for a patent was pending for three years it was all that time under scrutiny.

◆

Cleveland Soap Mfg. Co. has been organized in Cleveland by John H. Bustard, R. Hall and Michael Weil.

◆

Lever Bros. Co. has named J. E. Harris as supervisor of sales in Florida, a part of Georgia, North and South Carolina and Alabama.

◆

R. R. Deupree, president of Procter & Gamble Co., spoke on a nation-wide radio hook-up recently in a program sponsored by *Liberty Magazine*. In his talk he challenged the idea, current in certain schools of economic thought, that present day methods of distribution are costly and inefficient. He pointed out that progress in methods of distribution has been remarkably great and called attention to the important function of those engaged in distributive activity.

◆

Clenol, Inc., has recently been organized at 120 Michigan St., Toledo, to manufacture cleaning compounds.

◆

S. A. Smith & Co., soaps and sanitary supplies, formerly at 157 Chambers St., New York, are now at 92 Warren St.

◆

The Association of American Soap & Glycerine Producers has moved from 386 to 381 Fourth Ave., New York, the change of address covering also the Code Authority for the Soap and Glycerine Industry, Industrial Soap Association, Glycerine Producers Association and Cleanliness Institute. The new telephone number is MUrray Hill 4-5315.

◆

A Colgate-Palmolive-Peet Co. payroll amounting to $10,000 was saved from bandits in a recent holdup at the Jersey City plant. Patrolman Leon Van Clief was shot by the holdup men who then ran away without trying to get the payroll.

◆

H. S. Howard is the new president of American Home Products Co., Chicago, succeeding T. E. Caruso.

COLUMBIA

SODA ASH ★
CAUSTIC SODA ★
MODIFIED SODAS ★
CALCIUM CHLORIDE ★



THE COLUMBIA ALKALI CORPORATION

Executive Sales Offices
30 ROCKEFELLER PLAZA • NEW YORK

Branch Sales Offices
BARBERTON, OHIO
431-451 ST. CLAIR ST.
CHICAGO
CAREW TOWER
CINCINNATI
GRANT BUILDING
PITTSBURGH

Plant at BARBERTON, OHIO

Haskins Brothers & Co., Omaha, have recently been pushing the sale of their Trilby Toilet Soap to bring it back to a leading position which it once held in that market. The soap is a tricolor bar, now packaged attractively in a carton. The new Trilby sales campaign is reported meeting with very considerable success.

Lever Bros. Co. recently tried out an experiment to determine the advertising possibilities of classified space in newspapers. Small notes were run in four newspapers in the classified sections, offering two full size cakes of "Lifebuoy" to each reader who responded. After tabulating the results they will then determine whether to make classified space a regular part of their advertising program.

Billy B. Van's "Pine Tree" soap is now a five cent seller according to an announcement just received from Pine Tree Products Co., Newport, N. H.

In-No-Scent Corp. has been organized in Taco, Wash., by Harry S. Knox, A. Mirenta and G. E. Magnuson, to manufacture soaps and toilet preparations.

Percy Procter, son of William Procter, a co-founder with James Gamble of Procter & Gamble Co., died April 30 in Atlantic City at the age of eighty-three. Mr. Procter started his business career with Procter & Gamble, but later withdrew to establish the advertising firm of Procter & Collier Co. Mr. Procter was an uncle of the late William Cooper Procter and a brother of William A. Procter who was president of the company for many years.

Robert F. Smith, New Jersey manager for E. F. Houghton Co., Philadelphia, oil and grease products, died of a heart attack at his home in South Orange, N. J., April 26.

The code authority for the perfume, cosmetic and other toilet preparations industry has appointed the following new trade practice compliance committee to serve until July 1: Curtis Campaigne, Yardley & Co.; Paul Douglas, Bourjois, Inc.; Richard Grant, Veolay, Inc.; William Jacobs, George W. Button Company; Charles A. Pennock, Hudnut Sales Company, all of New York, and John W. Power, administration member. Mr. Grant was elected chairman.

J. M. Steverding has been appointed sales manager for the Kranich Soap Co., Brooklyn, according to an announcement by Herbert Kranich, president. He was formerly for twelve years associated with the Davies-Young Soap Co., Dayton, O.

H. P. McClure has been named district manager of the Dallas, Texas, toilet articles division of Colgate-Palmolive-Peet Co.

FILE LEVER BRIEF IN PATENT CASE

The defense brief in the million dollar Lamont patent suit involving Lever Bros. Co., Colgate-Palmolive-Peet Co., and Procter & Gamble Co., was filed by the attorneys for Lever Bros. Co., April 27, in the United States District Court, Northern District of Indiana. The plaintiffs have until May 28 to file their reply brief, and thereafter the defendant may file an additional memorandum. It is possible the oral hearing may be held some time in June.

In their brief for the defendant the Lever counsel made a series of replies to the charge of Colgate and Procter & Gamble that the Lamont patent had been infringed in the defendant's manufacture of "Rinso". They stated first that "Rinso", and not other product, was the pioneer in this particular field, and that changes instituted at various times in the process of manufacture owed nothing to the patents, as charged, but were merely normal improvements in the process and product, following practice which was old prior to the issuance of the patents in question.

Concerning the Lamont patent, it is argued that the spray drying of soap, was an old process prior to Lamont's work, and that the Lamont patent, if valid at all, must be limited to a specific process and product. It is argued further that neither the "Rinso" process nor the product itself infringe on Lamont. In support of this position it is pointed out that "Rinso" is an entirely different product from that covered by the patent, as it contains a large proportion of the very particles described by Lamont as not present in his product and also differs from the Lamont product in solubility.

RULE AGAINST P & G ON "CHIPSO"

The final ruling in the "Chipso"—"Chase-O" trademark controversy was handed down April 30, when the U. S. Court of Customs and Patent Appeals affirmed the previous decisions of the Examiner of Trademark Interferences and the Commissioner of Patents, both of whom had recommended cancellation of the Procter & Gamble mark, "Chipso", on petition of the J. L. Prescott Co., registrant of "Chase-O". According to the record the latter mark was registered in 1913 and the P & G mark in 1921. Procter & Gamble in its defense charged undue delay by the plaintiff in asking cancellation.

REWRITE BLAND BILL

All reference to a tax on imported tallow has been removed from the redraft of the Bland Bill, introduced in the United States House of Representatives as H. R. 7569 and taking the place of H. R. 5854 previously introduced. The new bill confines itself strictly to fish scrap, fish meal and fish fatty acids, and mention of oils and fats of vegetable and animal origin has been eliminated. Thus, it is reported, the fish oil men and the tallow renderers seem to have parted company, and the latter must find some other Congressman to sponsor their desired tax on imported tallow.

RECORD OF TRADE-MARKS

The following trade-marks were published in the April issues of the *Official Gazette* of the United States Patent Office in compliance with Section 6 of the Act of September 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of publication. As provided by Section 14, fee of ten dollars must accompany each notice of opposition.

TRADE MARKS FILED

YE OLDE ENGLISH LAVENDER—This is old English type describing shaving cream. Filed by Ye Olde Co., Brooklyn, Dec. 5, 1934. Claims use since Oct. 10, 1933.

MONKEY SHINE—This together with sketch of monkey, describing floor cleaner. Filed by R. A. Juetten Products Co., St. Paul, Jan. 8, 1935. Claims use since May 12, 1933.

HI-HAT—This in solid letters describing shoe cleaner and polish. Filed by Diamond Products Mfg. Co., New York, Feb. 18, 1935. Claims use since April 5, 1933.

COSOL—This in solid letters describing mouth wash. Filed by Cosol Co., Buffalo, Jan. 7, 1935. Claims use since Dec. 26, 1934.

"SANASIZE"—This in solid letters describing antiseptic. Filed by Louis Clement, New York, Feb. 1, 1935. Claims use since June 1, 1931.

WAHOO—This in solid letters describing insecticides. Filed by Louisiana Disinfecting Co., Leesville, La., Feb. 14, 1935. Claims use since May, 1933.

BAMERNITE—This in solid letters describing antiseptic. Filed by Schering Corp., Bloomfield, N. J., Feb. 15, 1935. Claims use since Feb. 5, 1935.

SPRA-FLOX—This in solid letters describing soaps, insecticides, etc. Filed by Sherwin-Williams Co., Cleveland, Jan. 9, 1935. Claims use since Dec. 7, 1934.

ACNESOLV—This on reverse plate describing antiseptic. Filed by Acnesolv Laboratories, Philadelphia, Jan. 22, 1935. Claims use since Dec. 14, 1934.

QU-A—This in solid letters describing antiseptic. Filed by K. & S. Laboratories, Inc., Denver, Jan. 25, 1935. Claims use since Nov. 1, 1933.

"FIXES"—This in solid letters describing exterminating preparation. Filed by Corn Fix Co., Newark, Feb. 4, 1935. Claims use since Jan. 30, 1935.

SANUS—This in heavy script describing soap. Filed by Otten & Lundahl, Chicago, Dec. 17, 1934. Claims use since Feb. 1, 1931.

RAND'S—This in solid letters with sketch of shoe under water tap, describing shoe polish. Filed by Rand Products Co., Worcester, Mass., Jan. 4, 1935. Claims use since March 1, 1934.

SHU-PRIM—This in solid letters describing shoe cleaner. Filed by Signal Chemical Co., Boston, Feb. 11, 1935. Claims use since Feb., 1934.

ROSE GLOW—This in solid letters with sketch of crown, describing polish. Filed by Jayzan, New York, Feb. 21, 1935. Claims use since Sept., 1934.

SNO-KOTE—This in outline letters describing shoe cleaner. Filed by Sno-Kote Co., New York, March 2, 1935. Claims use since Feb. 25, 1935.

DOX—This in solid letters describing tooth powder. Filed by Dox Co., Hastings, Nebr., Jan. 19, 1935. Claims use since Nov. 1, 1934.

CLORO-TABS—This in solid letters describing bleaching and disinfective tablets. Filed by Midland Chemical Co., Chicago, Feb. 4, 1935. Claims use since Dec. 20, 1934.

DERACLOUD—This in solid letters describing agricultural and animal insecticides. Filed by S. B. Penick & Co., New York, Feb. 8, 1935. Claims use since Jan. 15, 1935.

DERAMIST—This in solid letters describing agricultural and animal insecticides. Filed by S. B. Penick & Co., New York, Feb. 8, 1935. Claims use since Jan. 15, 1935.

MERCRESIN—This in solid letters describing antiseptic. Filed by Upjohn Co., Kalamazoo, Mich., Feb. 16, 1935. Claims use since Jan. 17, 1935.

PENTACRESOL—This in solid letters describing antiseptic. Filed by Upjohn Co., Kalamazoo, Mich., Feb. 16, 1935. Claims use since Jan. 17, 1935.

TUBASHINE—This on reverse plate describing shoe polish. Filed by Shur-Shine Products Co., Brooklyn, Oct. 2, 1934. Claims use since Jan. 1, 1932.

POR-AID—This in solid letters describing shaving cream. Filed by K. G. B. Laboratories, Haverstraw, N. Y., Dec. 12, 1934. Claims use since Nov. 15, 1934.

OLD ENGLISH LAVENDER—This in old English type describing soaps, shaving creams, etc. Filed by Yardley of London, Inc., Union City, N. J., March 7, 1935. Claims use since Sept., 1894.

JUMBO—This in solid letters describing wall paper cleaner. Filed by Cleveland Cleaner & Paste Co., Cleveland, March 8, 1935. Claims use since Feb. 5, 1935.

"DAMOSEL"—This in solid letters describing soaps, shaving creams, etc. Filed by Yardley of London, Inc., Union City, N. J., March 8, 1935. Claims use since Feb. 27, 1935.

KOOL—This in solid letters describing shoe polish. Filed by Clyde Collins Chemical Co., Memphis, March 9, 1935. Claims use since Feb. 2, 1935.

DIR-ITE—This in solid letters describing soaps and cleaning preparations. Filed by D'Tergo Products Co., Baltimore, March 9, 1935. Claims use since Aug. 7, 1934.

PAL—This in solid letters describing water softener

and cleaner. Filed by Leslie L. Linick, Chicago, Jan. 2, 1935. Claims use since July 30, 1933.

CAM-PHO-SAL—This in solid letters describing antiseptic. Filed by Dr. Salsbury's Laboratories, Charles City, Iowa. Feb. 20, 1935. Claims use since Jan. 1, 1929.

DR. M. R. PREPARATIONS—This in script within wreath, describing shampoos and antiseptic. Filed by Max M. Rosenberg, New York, Feb. 21, 1935. Claims use since Jan. 28, 1935.

WUNDER WAX—This in solid letters describing polish. Filed by Wonder Wax Mfg. Co., Cleveland, Jan. 10, 1934. Claims use since July, 1931.

RITE-WAY—This in solid letters describing saddlesoap and shoe polish. Filed by Cardinal Laboratories, Inc., Chicago, Jan. 14, 1935. Claims use since Jan. 1, 1924.

CHINTZ—This in solid letters describing toilet soap, shaving soap, etc. Filed by Ferd. Mulhens, Inc., New York, Jan. 31, 1935. Claims use since Jan. 24, 1935.

CLEM—This in solid letters together with sketch of man describing hand cleanser. Filed by R. H. Clemmer Laboratory, Allentown, Pa., Feb. 19, 1935. Claims use since July, 1934.

DASCO—This in solid letters describing shaving cream. Filed by Dasco Products Co., New York, Feb. 26, 1935. Claims use since March 30, 1932.

DRI-BATH—This on reverse plate together with sketch of dog, describing cleansing powder and insecticide for domestic animals. Filed by Dri-Bath Mfg. Co., Brooklyn, Nov. 30, 1934. Claims use since March 2, 1933.

PEDAID—This in solid letters describing antiseptic. Filed by Cala Co., Chicago, March 2, 1935. Claims use since July 16, 1934.

TRADE MARKS GRANTED

323,122. Polishing Preparation. West Disinfecting Co., Long Island City, N. Y. Filed Aug. 20, 1934. Serial No. 355,241. Published Jan. 22, 1935. Class 16.

323,208. Soaps. Kerk Guild, Inc., Utica, N. Y. Filed Nov. 12, 1934. Serial No. 358,139. Published Jan. 29, 1935. Class 4.

323,211. Soap, Grease, and Tallow for Soap Making. Consolidated Rendering Co., Boston. Filed Dec. 12, 1934. Serial No. 359,210. Published Jan. 29, 1935. Class 4.

323,214. Antiseptic. Sanite Chemical Co., Georgetown, Ky. Filed Dec. 11, 1934. Serial No. 359,185. Published Jan. 29, 1935. Class 6.

323,217. Antiseptic. Julius Schmid, Inc., New York. Filed Dec. 11, 1934. Serial No. 359,165. Published Jan. 29, 1935. Class 6.

323,219. Toothpaste. Norsec Co., Jersey City, N. J. Filed Dec. 10, 1934. Serial No. 359,138. Published Jan. 29, 1935. Class 6.

323,255. Liquid Dry Cleaning Detergent. Davies-Young Soap Co., Dayton, Ohio. Filed Dec. 7, 1934. Serial No. 359,029. Published Jan. 29, 1935. Class 4.

323,338. Liquid Polish. Continental Car-Na-Var Corp., Brazil, Ind. Filed Dec. 10, 1934. Serial No. 359,253. Published Feb. 5, 1935. Class 16.

323,415. Tooth Paste. Kal-Pheno Chemical Co., Philadelphia. Filed Dec. 12, 1934. Serial No. 359,228. Published Feb. 5, 1935. Class 6.

323,446. Fungicide, Germicide, and Antiseptic. Odor-Nox Laboratories, Inc., Los Angeles. Filed Dec. 11, 1934. Serial No. 359,180. Published Feb. 5, 1935. Class 6.

323,456. Insecticides. Black Flag Co., Baltimore. Filed Dec. 5, 1934. Serial No. 358,916. Published Jan. 29, 1935. Class 6.

323,457. Insecticides. Black Flag Co., Baltimore. Filed Dec. 5, 1934. Serial No. 358,915. Published Jan. 29, 1935. Class 6.

323,458. Shoe Polish. Larabee Products Co., Wichita, Kans. Filed Dec. 4, 1934. Serial No. 358,902. Published Feb. 5, 1935. Class 4.

323,567. Soap. Carman & Co., New York. Filed Dec. 14, 1934. Serial No. 359,295. Published Feb. 12, 1935. Class 4.

323,608. Tooth Powder. Dr. Owens Laboratories, Chicago. Filed Oct. 20, 1934. Serial No. 357,346. Published Feb. 12, 1935. Class 6.

323,611. Soap. Nassour Brothers, Inc., Los Angeles. Filed Oct. 31, 1934. Serial No. 357,700. Published Feb. 12, 1935. Class 4.

323,725. Water Softener. Tromite Corp., New York. Filed Dec. 5, 1934. Serial No. 358,956. Published Feb. 19, 1935. Class 6.

323,738. Polish. Stanco Inc., New York. Filed Nov. 20, 1934. Serial No. 358,453. Published Jan. 1, 1935. Class 16.

323,774. Wax for Furniture. Socony-Vacuum Oil Co., New York. Filed Jan. 15, 1935. Serial No. 360,296. Published Feb. 19, 1935. Class 16.

Eric Vless, president of Polak's Frutal Works, New York perfuming material house, will return the latter part of May from a three months' trip through the South and extending to the Pacific Coast. Shortly after his return, John Terveer, treasurer of the company, will go abroad for a visit to the company's headquarters at Amesfoort, Holland.

The Association of Canadian Perfumers and Manufacturers of Toilet Articles has entered a protest against the present Canadian 10 per cent tax on toilet articles and 5 per cent tax on toilet soaps. These taxes are in addition to the regular 6 per cent sales tax and are termed unjust and discriminatory.

SPOT REMOVERS

Cleaning and spotting fluids . . . a discussion of the characteristics, uses, and composition of spot removers, dry cleaning fluids, etc., will be published in the next issue or so of *Soap*. Investigation and article by Dr. C. A. Tyler. If you are interested in spotting fluids, do not miss it!

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FIRST, you need dependable silicate of soda, and next you ask, "When can I have it?" Eight plants east of the Rockies making nothing but P. Q. Silicate of Soda get deliveries to you on time. Often that ability to deliver promptly has saved a soap manufacturer hundreds of dollars.

Just as valuable as trustworthy P. Q. Silicate quickly available is the benefit you received from P. Q. research. Our experience in silicated detergents and soaps began 'way back in the Sixties.

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Chicago Sales Office: 205 W. Wacker Drive. Stocks in 60 cities.
Works: Anderson, Ind., Baltimore, Md., Buffalo, N.Y., Chester, Pa., Kansas City, Kans., Rahway, N. J., St. Louis, Mo., Utica, Ill
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P.Q. SILICATES OF SODA

New Equipment and Bulletins

IF YOU want additional information on any of the items described below or if you want any of the bulletins, catalogs, etc., send the coupon below to the Publishers of SOAP.

MacNair-Dorland Co., Inc.,
254 West 31st St., New York.

Send us additional information on the following as described in SOAP: Numbers.....
Company .....
Address .....
Attention of .....
Business .....

120. PACKAGE MACHINERY CO., Springfield, Mass. A new lost-cost carton wrapping machine, known as Model FA, with a speed of 80 packages per minute using wax paper, glassine or cellophane. Designed as an auxiliary of the large standard F-9 machine, and for the smaller manufacturer who cannot afford the larger equipment. Sells at about one-third the price of the larger machine. Fully adjustable to a variety of package sizes. Data available from manufacturer.

121. HARNISCHFEGER CORP., Milwaukee, is turning out a new machine for reconditioning returnable containers. Barrels are cleaned inside and out in an average time of 1½ to 2 minutes. The cleansing solution is recovered for re-use by a continuous pumping device. Handles barrels of various sizes in either horizontal or vertical position.

122. WILSON & BENNETT MFG. CO., Chicago, is distributing a new 128 page catalog showing its complete line of steel pails, barrels and drums of ½ to 65 gallon sizes. Complete specifications are given on all sizes and styles and the filling and dispensing openings that are available. Several pages in color show the Wilson & Bennett line of lithographed containers. Copies of the catalog are available to readers of SOAP.

123. SCIENTIFIC FILTER CO., New York, is introducing a new screw cap machine designed to handle screw caps of every description. The "S. F. Whirlwind" will handle from 50 to 100 caps per minute, tightening the caps uniformly to whatever tension is required. The caps must first be placed on the containers by hand. A folder describing the new machine is available on request.

124. J. P. DEVINE MFG. CO., Mt. Vernon, Ill., has issued a new condensed catalog describing its complete line of process equipment for the chemical and petroleum industries. Included in the catalog are a number of reference tables, including a handy temperature conversion table, hydrometer conversion tables, temperature-volume chart, and a water evaporation nomograph. Copies available.

125. PATTERSON FOUNDRY & MACHINE CO., East Liverpool, Ohio, has added a new model to its type "E" liquid mixer line, using the type "TD" stirrer. This line has recently been standardized and placed on a production basis.

126. ROOTS-CONNERSVILLE BLOWER CORP., Connersville, Ind., has issued a new bulletin, No. 260-B14, describing three new condensate units intended for heating systems and boiler feed service. They are built in a range of sizes from 2,000 to 70,000 sq. ft. of radiation, and are fully automatic. Copies of the bulletin are available.

127. ALSOP ENGINEERING CORP., New York, is introducing a new portable label pasting unit which handles labels of all sizes, shapes and styles. No belts are used in operation, the drive being of the syncromesh gear type. The glue applicator is equipped with a micromatic adjustment allowing the operator to set the machine instantly for films of varying thickness. The new unit is of aluminum and bronze construction.

128. INNIS, SPEIDEN & CO., New York, has recently perfected a liquid carbonate of potash, described as water white and sparkling clear.

129. NEW ENGLAND TANK & TOWER CO., Everett, Mass., has issued a new bulletin describing its line of agitator drives. Ratios, vertical shaft speeds and horse power ratings are given for all the various models available. Copies of the bulletin, No. 340, may be obtained through SOAP.

New Patents

Conducted by

Lancaster, Allwine & Rommel

Registered Attorneys

PATENT AND TRADE-MARK CAUSES

815 15th St., N. W., Washington, D. C.

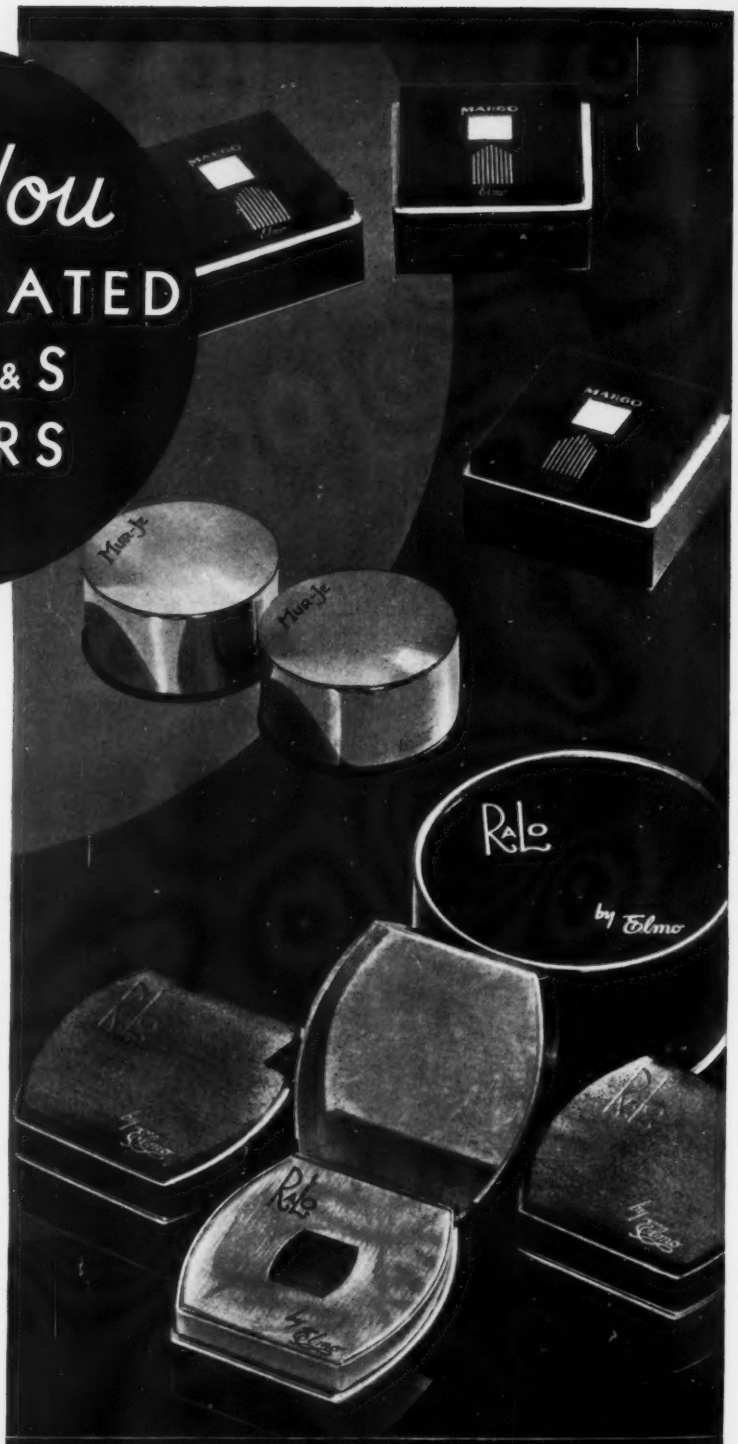
Complete copies of any patents or trade-mark registration reported below may be obtained by sending 25c for each copy desired to Lancaster, Allwine and Rommel. Any inquiries relating to Patent or Trade-Mark Law will also be freely answered by these attorneys.

No. 1,993,097, Metal Cleaning Composition. Patented March 5, 1935 by Paul Hodges, Tuscaloosa, Ala., assignor to Gulf States Paper Corporation. A metal cleaning and corrosion inhibiting composition comprising "floating soap" obtained from the black liquors in the manufacture of soda or sulfate cellulosic material, an organic metal cleaning solvent, and water, the "soap" comprising at least 20 per cent of the active ingredients.

No. 1,993,686, Disinfecting Soaps. Patented March 5, 1935 by Wilhelm Schulenburg, Frankfort-on-the-Main,

(Turn to Page 49)

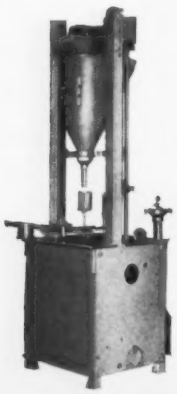
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Despite the relatively low cost of the S & S Universal Filler it has given long, dependable service in countless plants in every part of the world. Its smooth speed and uncanny accuracy have made it a paying proposition to large and small manufacturers alike.

It may pay you to investigate the S & S Fillers. An S & S Engineer will be glad to give you the details without obligation. Or, if you prefer, write for descriptive literature



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CONTRACTS AWARDED

General Soap Co., San Francisco, was low bidder on 7,500 lbs. laundry soap for Panama Canal in a recent bidding, with a quotation of $277.50. Colgate-Palmolive-Pet Co., Jersey City, entered the low bid of $370 on 5,000 lbs. chip soap. Walthaw Corp., New York, bid low on 10,000 lbs. trisodium phosphate with $360. Low bidder on 4,000 cans caustic soda was B. T. Babbitt Co., Washington, quoting $206.40.

In a recent Washington U. S. Marine Corps bidding Armour & Co., Chicago, was low bidder on 42,000 lbs. soap powder with a quotation of 2.68c and on 7,000 cans cleaner with 2.5c. Conray Products Co., New York, was low bidder on 2,025 lbs. chip soap with a quotation of 6.78c. On 564 lbs. grit soap Swift & Co., Chicago, entered the low bid of 8.03c, while on 6,250 lbs. toilet soap Iowa Soap Co. had the low bid of 6.56c. H. Friedman & Sons, New York, was low bidder on 532 pkgs. cleaner with a bid of 13.25c.

Colgate-Palmolive-Peet Co. has been awarded a contract covering 389,400 lbs. laundry soap for Fort Sam Houston at a price of 4.017c. Conray Products Co., New York, awarded 11,200 cakes grit soap at 3.68c. Buckeye Soda Co., Houston, awarded 2,176 cans caustic soda at 4.87c. Semple Mfg. Co., Washington, awarded 4,266 cotton mops at 31.25c.

R. M. Hollingshead Co., Camden, N. J., has been awarded contracts covering 6,000 gallons floor polish for Perry Point at 47.5c and 4,000 gallons for Chicago at 50.5c.

Merchants Chemical Co., New York, has been awarded contracts covering 15,000 lbs. soda ash for Washington Marine Corps at 1.91c lb. and 11,000 lbs. laundry soda at 1.86c lb.

B. T. Babbitt & Co. awarded 2,400 dozen cans of soda for Treasury Department, Washington, at 50c dozen. American Soap & Washoline Co. awarded 7,800 lbs. scouring powder at 1.18c lb. J. Eavenson & Sons awarded 8,000 lbs. soap at 10.25c and 10,000 lbs. at 9.75c.

John T. Stanley Co., New York, awarded 150,000 laundry soap for Treasury Department, Washington, at a price of 3.642c; also 4,000 lbs. grit soap at 7.5c.

Charles Chemical Co. awarded 1,600 gallons metal polish for Post Office Department, Washington, at 33.9c. Colgate-Palmolive-Peet Co. awarded 40,000 lbs. laundry soap at 3.87c.

Procter & Gamble Distributing Co. has been awarded a contract for 250,000 cakes of toilet soap for the Brooklyn U. S. Army quartermaster at a price of 1.25c each. Trade Laboratories has been awarded 250,000 tubes shaving cream at 3.885c and 250,000 tubes tooth paste at 3.004c.

Grady Manufacturing Co., L. I. City, N. Y., has been awarded a contract for 1,700 lbs. metal polish for Benicia Arsenal, Cal., at a price of 13c lb.

American Cyanamid & Chemical Corp., New York, has been awarded a contract for 6,000 lbs. soda ash for Edgewood Arsenal, Md., at a price of 1.89c lb. B. P. Ducas Co., New York, awarded 2,000 lbs. trisodium phosphate at 3.145c.

Castile soap imports into the United States decreased from 2,020,267 pounds in 1933 to 1,822,005 pounds in 1934. The value increased from $182,402 to $211,525.

The New York sales office of Bopf-Whittam Corp., Westfield, N. J., was moved April 15 to new and larger quarters in the Empire State building.

H. M. Trego, for many years identified with the Ohio retail grocery trade, has recently become associated with the sales division of Cincinnati Soap Co.

APPROVE SOAP CODE BUDGET

The National Industrial Recovery Board announced approval, April 20, of a budget and basis of contribution submitted by the Code Authority for the soap and glycerine manufacturing industry to cover code administration expenses from December 21, 1934, to December 20, 1935. The order of approval became effective May 2. Estimated expenditures for the year's period total $82,500, and the estimated total receipts available for the budgetary period amount to $89,054.03. Of this amount, $29,054 represents the balance carried forward from 1934, and $60,000 to be raised during the budgetary period. The suggested basis of contribution, which represents a reduction of 25 per cent from the 1934 rate, is 3/10 of 1 mill per net dollar of 1934 sales.

It is provided that, until further notice, the Code Authority may not obligate itself to spend any funds after June 16, the expiration date of the present NRA act. In the meantime the code authority may spend only the percentage of the total sum which corresponds to the percentage of the total budgetary period represented by the number of days before June 16, and members are required to contribute on a like percentage basis only.

Market Report on

TALLOW, GREASES, AND OILS

(*As of May 7, 1935*)

NEW YORK—Oil and fat prices were but little changed this period, holding pretty closely to the levels of a month ago. The market has been quiet much of the past month, with buyers being disposed to follow a waiting policy pending further developments both in the general market situation and the Washington legislative program. The strongest features this period were coconut oil and copra, each being quoted a half a cent a pound higher than the prices at the close of last period. Tallow eased off fractionally this period, but recovered some of the ground lost before the close of the period. One of the important considerations in this market is the prospect of a tax on imports. At the present moment the original draft of the Bland bill, proposing such a tax, has been redrawn, but there is always a possibility that the renderers may find some other legislator to father their tax measure.

COCONUT OIL

Coconut oil, which dropped a cent a pound last period following a sharp advance, recovered half of the lost ground this period and New York tanks are now quoted at 5¾c lb. This recovery seems to indicate that the recent downward dip was in reality only a temporary reaction, and does not indicate any reversal of the strong upward trend. Copra was quoted a half cent a pound higher this period, at 3¼c lb. The market was quiet, with buyers disposed to await further developments.

CORN OIL

Corn oil eased off further this period in a market characterized by quiet demand. The current price is 9½c lb. for mill tanks, as compared with the high for the recent advance of 11c.

OLIVE OIL

Both commercial olive oil and olive oil foots were quoted fractionally lower this period in spite of the fact that stocks are believed to be quite light. The current quotation on foots is about 8½c per lb., and on commercial oil 84 to 85c gal.

PALM OIL

Palm oil quotations eased further this period, bringing the current level to around 4¾ to 4½c lb. In this situation both palm and palm kernel are attractively priced for the soap kettle, in view of the present comparative price of 5¾c on coconut oil.

TALLOW

Tallow eased off earlier in the period, but later recovered much of the ground lost, closing the period at a figure only fractionally below the level of a month ago. The current quotation on city extra is 6¾c lb. In many quarters a further advance is anticipated in tallow prices due to the present reduced tallow output and the probability that this will not increase for six months at least.

Dr. Karl T. Steik, director of research of National Oil Products Co., Harrison, N. J., spoke on the subject of "White Oils" at the April 26th meeting of the New York section of the American Association of Textile Chemists and Colorists. The meeting was held at the Alexander Hamilton Hotel, Paterson, N. J.

FAT PRICES DROPPED IN APRIL

Prices for oils and fats declined in April from the high levels reached in March, according to the index figure compiled by the Bureau of Raw Materials for American Oils and Fats Industries. The April index figure dropped about five per cent from March, although it stood more than fifty per cent above the figure for April a year ago. The March index was 114.5 and that for April 108.2. In April, 1934, it was 73.0. The index of rosin prices also dropped last month. Comparative figures for March, April, and April, 1934, for individual oils and fats follow:

	April, 1935	*March*, 1935	*April*, 1934
Corn oil	157.2	193.2	94.3
Cottonseed oil	163.6	173.7	77.4
Lard	105.1	111.9	43.5
Oleo oil	130.3	140.0	59.1
Peanut oil	128.4	141.2	68.2
Sesame oil	127.0	129.3	74.1
Soybean oil	154.2	162.4	109.3
Stearin, oleo	98.5	111.1	52.3
Castor oil	97.3	97.3	97.3
Chinawood oil	167.5	167.1	100.0
Coconut oil	57.9	62.1	38.8
Cod oil	76.3	76.3	89.5
Grease	107.1	109.6	53.5
Herring oil	——	——	41.2
Linseed oil	105.8	105.3	103.6
Menhaden oil	103.6	117.4	100.8
Olive oil	101.6	103.6	106.0
Olive oil foots	118.2	118.1	94.4
Palm oil	64.4	69.5	52.8
Palm kernel oil	52.6	59.8	44.9
Rapeseed oil	68.8	76.6	62.5
Tallow	94.9	97.1	50.6
Whale oil	116.9	117.8	103.4

More About Hand Cleaners

A Further Discussion of Hand Cleaners is the title of an article which will be published in the next issue of *Soap*. If you read the first article on this subject by W. E. Wilkinson, you will find some additional interesting comments in this supplementary article.

Market Report on

SOAP AND DISINFECTANT CHEMICALS

(As of May 7, 1935)

NEW YORK—The soap industry continued to take normal stocks of chemical raw materials this period, with productive schedules holding up very well. The seasonal slackening has not yet begun to be observed as it has in some other chemical consuming industries. The sanitary products industry is also showing normal activity for this time of the year, with insecticides and moth control products coming into seasonal prominence.

ALKALIS

Alkali producers report an increased volume of business for the month of April, although it is noted that some users are already showing signs of tapering off in their withdrawals in anticipation of reduced activity over the summer months. Soap manufacturers continue to draw substantially against existing contracts, with activity in the industry at a comparatively high level. Prices are without change.

COAL TAR PRODUCTS

Naphthalene flakes and balls continue to be prominent items under seasonal influences, although demand from this consuming quarter may be expected to taper off very shortly. Prices are reported steady at previous levels. Solvent naphtha is still in short supply, with demand heavy.

GLYCERIN

Crude glycerin was fractionally higher in price this period. Demand continues heavy and prevents producers from piling up any substantial stocks.

PYRETHRUM

Lower prices have recently been the rule on pyrethrum products, with the current market ranging from 27c to about 32c lb. Those in touch with the primary market say that either the current crop is far above normal or else the size of the last crop was misrepresented by Japanese sellers.

ROSIN

The naval stores situation was cleared up somewhat this past week with the announcement that $7,000,000 of government funds would be made available for loans to finance the current naval stores crop. Up to now there has been little forward buying of rosin, due to the uncertainty, but it is expected now that there will be more of an incentive for users to anticipate their future requirements.

♦

American exports of soaps and toilet preparations totaled $808,000 for the first two months of 1935, an increase of almost twenty per cent as compared with the $667,000 total for the first two months of 1934. Soaps amounted to $185,000 of the 1935 total, as compared with $169,000 in the first two months of last year.

Almond W. Barnes Soap Co., Brooklyn which failed recently with liabilities of approximately $45,000, was the scene of an auction sale, April 24, at which the stock and some of the machinery were sold. The total proceeds of the sale were only about $3,500. The plant itself was not sold, nor was the great part of the process machinery. It is understood that these are privately owned and will be disposed of separately. Plans for their sale have not yet been announced.

♦

In a recent vote at the Jersey City plant of Colgate-Palmolive-Peet Co., eighty-five per cent of the 800 employees selected the company's Employees' Representative Committee to act for them in discussing employee affairs with officials of the company. William J. Murphy, New Jersey organizer for the American Federation of Labor, had been representing that the majority of employees in the company belong to a local soap makers union, but in view of the vote this now seems highly improbable. A conference planned between the federation and the company has subsequently been postponed indefinitely.

♦

NEW PATENTS

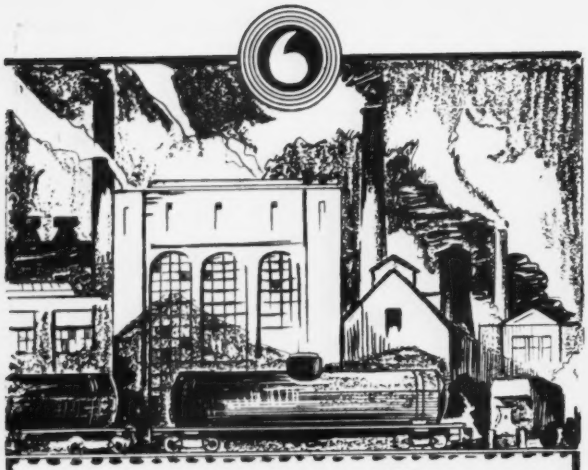
(From Page 45)

Germany, assignor to Deutsche Gold-und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. A soap which contains silver subchloride.

No. 1,995,240, Perfumes, Cosmetics and Perfumed Soaps, Patented March 19, 1935 by John William Bladgden, Ilford, England. Perfumed preparations for cosmetic and toilet use, including toilet soaps, which preparations contain a substance adapted to impart odour and as a fixative therefor a material selected from the group consisting of cyclohexylcyclohexanol and methylcyclohexyl-methylcyclohexanol.

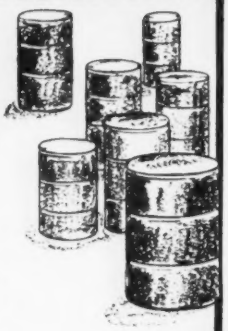
No. 1,995,247, Material for Repelling Insects, Patented March 19, 1935 by Berthold Gunther Haring, Valparaiso, Chile, assignor, by direct and mesne assignments, to Hermann Wilhelm Haring, Gerbstedt, Germany. An insect repellant comprising a substitution product of coumarin.

No. 1,995,862, Polishing Composition, Patented March 26, 1935 by Herbert Spencer Polin, New York, N. Y., assignor to Polin, Inc., New York, N. Y. The method of preparing a cleaning and polishing composition which comprises emulsifying water insoluble wax and rosin oil with a solution of soap and an animal or vegetable oil.



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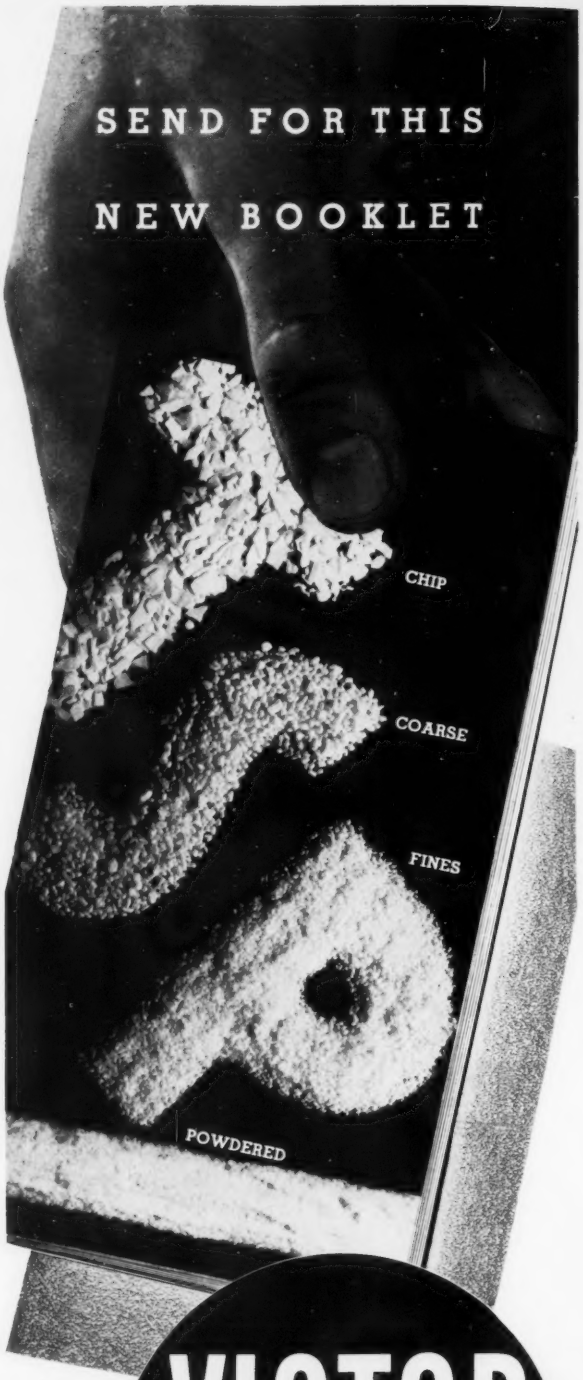
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Market Report on

ESSENTIAL OILS AND AROMATICS

(*As of May 7, 1935*)

NEW YORK—The big development of the period as far as prices of essential oils were concerned was the sharp advance in anise and cassia oils. With the announcement of the higher government buying price for silver, Chinese exchange shot upward abruptly, and quotations on anise and cassia were advanced several cents a pound each succeeding week. With replacement costs rising, substantial buying interest was attracted to the market, and there was considerable activity in these oils. Camphor derivatives also advanced this period, following reports of the Formosa earthquake. Among the oils to show lower prices this period were bergamot oil, Java citronella oil, lemongrass oil, and petitgrain oil.

ANISE OIL

The advancing price of silver carried anise oil along with it this period in a sharp upward movement. The spot market was fifteen cents a pound higher at the close of the period, with the range being from 58 to 62c. Speculative interest was active on the rise, and considerable business was done not only by those who wished to make sure of supplies, but also by traders who felt that the market would go even higher when the stocks obtained at lower market levels were exhausted. The shipment market is even stronger than spot quotations.

BERGAMOT OIL

Spot quotations were reduced moderately this period as competitive quotations began to appear in the market following the recent period of comparative stability. The current range of prices is from $1.45 to $1.65.

CASSIA OIL

The same factors which caused the rise in price of anise oil also served to push the cassia oil price upward sharply this period. The price at the end of the period was ten cents a pound higher, with the range being from $1.50 to $1.55 per pound.

CITRONELLA OIL

Java oil was in rather substantial supply on spot, with the result that competitive conditions ruled the market. Quotations at the close of the period were three cents a pound lower, with a range from 28 to 33c per pound. Ceylon oil was unchanged in price.

GERANIUM OIL

A firm situation prevailed in this market, with sellers being not at all disposed to shade their asking prices in view of the limited offerings of shippers for future delivery. The spot market advanced to a basis of $4.90 for African oil and $4.75 for Bourbon.

LEMONGRASS OIL

Lower cables have been received on new crop oil, with a resultant drop in the spot market on lemongrass oil to a basis of 75 to 95c per pound.

Certified Chemical Products Co., formerly at 1244 11th St., Denver, has relocated at 1130 Kalamath St.

◆

Polak's Frutal Works, New York, essential oils and aromatics, has issued a new price list and catalog as of May, 1935.

◆

NEW USE FOR LIQUID SOAPS

In the booths where spray painting is done, the excess waste spray is carried along by a current of exhaust air and settles on the sides of the booth as well as upon baffle plates of the exhaust device. It is claimed after recent studies of spraying practices that as much as 90 per cent of the waste spray is caught by the baffles. Experts of the New York Industrial Commission now claim that the best method of keeping such equipment clean is to spray the entire interior before using with a liquid soap which will dry but not harden. This action makes a membrane of soap between the metal wall of the booth and the deposited paint. The waste paint and soap may then be easily cleaned off with a wooden scraper. In many cases a stream of water dissolves the soluble soap and causes the disintegration of the insoluble paint deposit. In cleaning by this method the surfaces of the various parts of the cabinet are perfectly clean and when dried are ready for another application of the liquid soap.

◆

HOLD HEARINGS ON CODE AMENDMENTS

Public hearings were held in Washington, May 3, before Deputy Administrator Erle W. Dahlberg on proposed revisions to the soap and glycerine code and the code for the perfume, cosmetic and other toilet preparations industry. The amendments, sponsored by the code authorities for the two industries, will have the effect, if adopted, of putting all toilet soap, shaving soap and shaving powder under the soap code; and of putting all shaving cream, and all shampoo packaged for retail sale, under the cosmetics code. It was brought out at the hearing that bulk shampoo sold to beauty parlors and barber shops, and cake shampoo, would be governed by the soap code. Several concerns were represented at the hearing to object to various points involved, and a number of others had previously forwarded written objections. The points involved were not made public at the hearing, but will be taken into consideration by NRA in arriving at its decision.

◆

Cox, Aspden & Fletcher, Inc., New York, have been appointed sole agents in the United States for the Australian sandalwood oil produced by Plaimar, Ltd., of Perth, West Australia.

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CURRENT PRICE QUOTATIONS

(As of May 7, 1935)

Minimum Prices are for car lots and large quantities. Price range represents variation in quotations from different suppliers and for varying quantities.

Chemicals

Acetone, C. P., drums	lb.	$ .11	$ .12½
Acid, Broic, bbls., 99½%	ton	95.00	100.00
Cresylic, 97½ dk., drums	gal.	.43	.44
97-99%, pale, drums	gal.	.46	.47
Low boiling grade	gal.	.64	.65
Oxalic, bbls.	lb.	.11½	.12¼
Adeps Lanae, hydrous, bbls.	lb.	.16	.18
Anhydrous, bbls.	lb.	.17	.19
Alcohol, Ethyl, U. S. P., bbls.	gal.	4.16	4.28
Complete Denat., No. 5, drums, ex.	gal.	.35½	.43½
Alum. Potash lump	lb.	.03½	.03¾
Ammonia Water, 26°, drums, wks.	lb.	.02½	.02¾
Ammonium Carbonate, tech., bbls.	lb.	.08	.12½
Bleaching Powder, drums	100 lb.	2.15	3.50
Borax, pd., cryst., bbls., kegs	ton	50.00	55.00
Carbon Tetrachloride, car lots	lb.	—	.05¼
L. C. L.	lb.	.07	.08½
Caustic, see Soda Caustic, Potash Caustic			
China Clay, filler	ton	10.00	25.00
Cresol, U. S. P., drums	lb.	.11	.11½
Creosote Oil	gal.	.11½	.12½
Feldspar (200 to 325 mesh)	ton	14.00	15.00
Formaldehyde, bbls.	lb.	.06	.07
Fullers Earth	ton	15.00	24.00
Glycerine, C. P., drums	lb.	.14	.14½
Dynamite, drums	lb.	.13¾	.14¼
Saponification, drums	lb.	.10½	.11
Soap lye, drums	lb.	.09½	.10
Hexalin, drums	lb.	—	.30
Kieselguhr, bags	ton	—	35.00
Lanolin, see Adeps Lanae.			
Lime, live, bbls.	per bbl.	1.70	2.20
Mercury Bichloride, kegs	lb.	.71	.76
Naphthalene, ref. flakes, bbls.	lb.	.04¾	.05¼
Nitrobenzene (Myrbane) drums	lb.	.09	.11
Paradichlorbenzene, bbls., kegs	lb.	.16	.25
Petrolatum, bbls. (as to color)	lb.	.02	.07¼
Phenol, (Carbolic Acid), drums	lb.	.14¼	.16
Pine Oil, bbls.	gal.	.59	.64
Potash, Caustic, drums	lb.	.06¼	.06½
Flake	lb.	.07	.07¼
Potassium Carbonate, solid	lb.	.07¼	.09½
Liquid	lb.	.03½	.03¾
Pumice Stone, powder	100 lb.	3.00	4.00
Rosins (600 lb. bbls. gross for net)—			
Grade B to H, basis 280 lbs.	bbl.	4.65	5.70
Grade K to N	bbl.	5.72	6.10
Grade WG and X	bbl.	6.50	7.40
Wood	bbl.	4.35	5.85
Rotten Stone, pwd. bbls.	lb.	.02½	.04½
Silica	ton	20.00	27.00
Soap, Mottled	lb.	.04⅛	.04⅜
Olive Castile, bars	lb.	.13	.19
powder.	lb.	.23	.30
Olive Oil Foot	lb.	.07	.07½
Powdered White, U. S. P.	lb.	.19	.21
Green, U. S. P.	lb.	.06½	.08
Tallow Chips	lb.	.07¼	.07¾
Whale Oil, bbls.	lb.	.05	.06
Soda Ash, cont., wks., bags, bbls.	100 lb.	1.23	1.50
Car lots, in bulk	100 lb.	—	$1.05
Soda Caustic, cont., wks., sld.	100 lb.	—	2.60
Flake	100 lb.	—	3.00
Liquid, tanks	100 lb.	—	2.25
Soda Sal., bbls.	100 lb.	1.10	1.30
Sodium Chloride (Salt)	ton	11.40	14.00
Sodium Fluoride, bbls.	lb.	.07¼	.08¾
Sodium Hydrosulphite, bbls.	lb.	.19	.20
Sodium Silicate, 40 deg., drum.	100 lb.	.80	1.20
Drums, 52 deg. wks.	100 lb.	1.35	1.75
Tar Acid Oils, 15-25%	gal.	.21	.24
Trisodium Phosphate, bags, bbls.	lb.	.03	.03½
Zinc Oxide, lead free	lb.	.06	.06¼
Zinc Stearate, bbls.	lb.	.20	.22

Oils — Fats — Greases

Castor, No. 1, bbls.	lb.	.10¼	.11
No. 3, bbls.	lb.	.09¾	.10½
Coconut			
Manila, tanks, N. Y.	lb.	—	.05¾
Tanks, Pacific coast	lb.	—	.05¼
Cod, Newfoundland, bbls	gal.	.33	.34
Copra, bulk, coast	lb.	.03⅛	.03¼
Corn, tanks, mills	lb.	.09¼	.09½
Cottonseed, crude, tanks, mill	lb.	.09¼	.09½
PSY	lb.	—	Nom.
Degras, Amer., bbls.	lb.	.05¼	.06
English, bbls.	lb.	.05	.05½
Neutral, bbls.	lb.	.08	.11
Greases, choice white bbls.. N. Y.	lb.	.07	.08¼
Yellow	lb.	.06½	.06⅝
House	lb.	.06½	.06⅝
Lard, City	lb.	.13½	.13¾
Compound tierces	lb.	.12½	.12¾
Lard Oil,			
Extra, bbls.	lb.	—	.11¼
Extra. No. 1, bbls.	lb.	—	.10¾
No. 2, bbls.	lb.	—	.10
Linseed, raw, bbls., spot	lb.	.0950	.0990
Tanks, raw	lb.	—	.0890
Boiled, 5 bbls. lots	lb.	—	.1070
Menhaden, Crude, tanks, Balt.	gal.	.30	Nom.
Oleo Oil, No. 1, bbls., N. Y.	lb.	—	.13
No. 2, bbls., N. Y.	lb.	—	.12¼
Olive, denatured bbls., N. Y.	gal.	.84	.85
Foots, bbls., N. Y.	lb.	.08⅜	.08½
Palm	lb.	.04½	.04¾
Palm Kernel, casks, denatured	lb.	.04¾	Nom.
Peanut, domestic tanks	lb.	.09½	Nom.
Red Oil, distilled bbls.	lb.	.09⅛	.10½
Saponified bbls.	lb.	.09⅛	.10½
Tanks	lb.	—	.08¼
Soya Bean, domestic tanks, N. Y.	lb.	—	.09½
Stearic Acid,			
Double pressed	lb.	.11¼	.12¼
Triple pressed, bgs.	lb.	.14¼	.15¼
Stearine, oleo bbls.	lb.	.10	.10½
Tallow, special, f.o.b. plant	lb.	.06⅝	—
City, ex. loose, f.o.b. plant	lb.	.06¾	—
Tallow, oils, acidless, tanks, N. Y.	lb.	—	.10
Bbls., c/l N. Y.	lb.	—	.10½
Whale, refined	lb.	.07¾	.08

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PALM KERNEL OIL
PEANUT OIL
RAPESEED OIL
ROSIN
SALAD OIL
SOYA BEAN OIL
SESAME OIL
TEASEED OIL
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Essential Oils

Almond, Bitter, U. S. P.	lb.	$2.00	$2.50
Bitter, F. F. P. A.	lb.	2.25	2.75
Sweet, cans	lb.	.58	.60
Anise, cans U. S. P.	lb.	.58	.62
Apricot, Kernel, cans	lb.	.22	.25
Bay tins		1.25	1.50
Bergamot, coppers	lb.	1.45	1.65
Artificial	lb.	1.00	1.30
Birch Tar, rect. tins	lb.	.70	.75
Crude, tins	lb.	.12	.16
Bois de Rose, Brazilian	lb.	1.25	1.60
Cayenne	lb.	2.80	2.90
Cade, cans	lb.	.26	.30
Cajuput, native, tins	lb.	.50	.60
Calamus, tins	lb.	3.25	3.50
Camphor, Sassy, drums	lb.	—	.19
White, drums	lb.	—	.20
Cananga, native, tins	lb.	2.50	2.80
Rectified, tins	lb.	2.95	3.50
Caraway Seed	lb.	1.90	2.20
Cassia, Redistilled, U. S. P.	lb.	1.50	1.55
drums	lb.	—	1.48
Cedar Leaf, tins	lb.	.57	.70
Cedar Wood, light, drums	lb.	.22	.27
Citronella, Java, drums	lb.	.28	.33
Citronella, Ceylon, drums	lb.	.27	.29
Cloves, U. S. P., tins	lb.	.87	.92
Eucalyptus, Austl., U. S. P., cans	lb.	.27	.30
Fennel, U. S. P., tins	lb.	1.00	1.25
Geranium, African, cans	lb.	4.90	7.00
Bourbon, tins	lb.	4.75	6.75
Hemlock, tins	lb.	.70	.75
Lavender, U. S. P., tins	lb.	2.60	7.00
Spike, Spanish, cans	lb.	1.00	1.60
Lemon, Ital., U. S. P.	lb.	1.20	1.60
Lemongrass, native, cans	lb.	.75	.95
Linaloe, Mex., cases	lb.	1.35	1.50
Nutmeg, U. S. P., tins	lb.	1.20	1.35
Orange, Sweet W. Ind., tins	lb.	1.80	2.20
Italian cop.	lb.	1.75	3.00
Distilled	lb.	.65	.70
Origanum, cans, tech.	lb.	.60	.70
Patchouli	lb.	2.75	3.50
Pennyroyal, dom.	lb.	1.85	1.90
Imported	lb.	1.35	1.70
Peppermint, nat., cases	lb.	2.65	3.15
Redis., U. S. P. cases	lb.	2.90	3.35
Petit, Grain, S. A. tins	lb.	.95	1.10
Pine Needle, Siberian	lb.	.85	.95
Rose, Natural	oz.	5.50	18.00
Artificial	oz.	2.00	3.00
Rosemary, U. S. P., tins	lb.	.32	.38
Tech., lb. tins	lb.	.28	.35
Sandalwood, E. Ind., U. S. P.	lb.	5.00	5.50
Sassafras, U. S. P.	lb.	.75	1.00
Artificial	lb.	.45	.50
Spearmint, U. S. P.	lb.	1.65	1.75
Thyme, red, U. S. P.	lb.	.58	1.02
White, U. S. P.	lb.	.65	1.10
Vetivert, Bourbon	lb.	7.50	8.50
Java	lb.	16.00	20.00
Ylang Ylang, Bourbon	lb.	4.60	7.00

Aromatic Chemicals

Acetophenone, C. P.	lb.	$1.25	$2.25
Amyl Cinnamic Aldehyde	lb.	1.75	2.50
Anethol	lb.	1.00	1.10
Benzaldehyde, tech.	lb.	.60	.65
U. S. P.	lb.	1.10	1.30
Benzyl, Acetate	lb.	.60	1.00
Alcohol	lb.	.75	1.15
Citral	lb.	2.55	2.65
Citronellal	lb.	2.05	2.50
Citronellol	lb.	2.25	2.70
Citronellyl Acetate	lb.	4.50	7.00
Coumarin	lb.	3.10	3.30
Cymene, drums	gal.	.90	1.25
Diphenyl oxide		.85	1.25
Eucalyptol, U. S. P.	lb.	.62	.65
Eugenol, U. S. P.	lb.	2.00	2.50
Geraniol, Domestic	lb.	1.25	2.00
Imported	lb.	2.00	3.00
Geranyl Acetate	lb.	3.00	3.50
Heliotropin	lb.	2.00	2.10
Hydroxycitronellal	lb.	3.50	9.00
Indol, C. P.	oz.	2.00	2.50
Ionone	lb.	3.60	6.50
Iso-Eugenol	lb.	3.00	4.25
Linalool	lb.	1.65	2.25
Linalyl Acetate	lb.	1.85	4.25
Menthol	lb.	3.50	3.60
Methyl Acetophenone	lb.	2.50	3.00
Anthranilate	lb.	2.15	3.20
Paracresol	lb.	4.50	6.00
Salicylate, U. S. P.	lb.	.40	.45
Musk Ambrette	lb.	4.75	6.00
Ketone	lb.	5.00	6.50
Xylene	lb.	1.50	2.50
Phenylacetaldehyde	lb.	4.80	8.00
Phenylacetic Acid, 1 lb., bot.	lb.	3.00	4.00
Phenylethyl Alcohol, 1 lb. bot.	lb.	4.00	4.50
Rhodinol	lb.	5.75	8.00
Safrol	lb.	.58	.60
Terpineol, C. P., 1,000 lb. drs.	lb.	.33	.35
Cans	lb.	.36	.37
Terpinyl Acetate, 25 lb. cans	lb.	.80	.90
Thymol, U. S. P.	lb.	1.40	1.50
Vanillin, U. S. P.	lb.	3.00	3.50
Yara Yara	lb.	1.30	2.00

Insecticide Materials

Insect powder, bbls.	lb.	.27	.30
Concentrated Extract			
5 to 1	gal.	1.69	1.72
15 to 1	gal.	4.84	4.88
20 to 1	gal.	6.45	6.50
30 to 1	gal.	9.48	9.56
Derris, powder—4%	lb.	.43	.46
Derris, powder—5%	lb.	.48	.51

Gums

Arabic, Amb. Sts.	lb.	.12	.14
White, powdered	lb.	.16	.16½
Karaya, powdered No. 1	lb.	.08	.09
Tragacanth, Aleppo, No. 1	lb.	1.15	1.20
Sorts	lb.	.11	.12

Waxes

Bees, white	lb.	—	.33½
African, bgs.	lb.	.21	.22
Refined, yel.	lb.	.27	.28
Candelilla, bgs.	lb.	.10¾	.11¾
Carnauba, No. 1	lb.	.39	.41
No. 2, yel.	lb.	.37½	.39
No. 3, chalky	lb.	.30	.32
Ceresin yellow	lb.	.36	.38
Paraffin, ref. 125-130	lb.	.04¼	.04½

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NEW SOAP CODE RULINGS

(*From Page* 31)

year with pay. We are wondering just how we should treat this matter in computing the average hours worked over a six-months' period. The pay for the vacation week is figured on the basis of 40 hours.

Questions: (a) If an employee works 25 weeks of 40 hours each and the 26th is a vacation with pay, is his weekly average 38.4 or 40 hours?

(b) If he totals 1,016 hours for 25 weeks and the 26th week is a vacation with pay, is his weekly average 40.6 or 39 hours?

Answer: Vacation time is not work. With this in mind, the answer to (a) is 38.4 and to (b) is 39; time given as vacation not to be included in hours worked.

Facts: We find it difficult to decide whether or not certain of our employees are "immediate assistants" to employees in a managerial, supervisory or executive capacity and therefore are permitted to work not more than 48 hours per week.

Question: What is the meaning of words "immediate assistants to employees in a managerial, supervisory or executive capacity" as used in Article III, A, 2 of the Code?

Answer: Immediate assistants to employees in a managerial, supervisory or executive capacity are those who devote the major portion of their working time in directly assisting those employed in such managerial, supervisory or executive capacity, and in the absence of such persons are usually authorized to act for and in their behalf.

Facts: Our soap manufacturing business is a partnership in which there are three working partners, but no hired employees. No salary is drawn by any working partner. All three are compensated by a fixed percentage of the earnings of the business.

Question: Are working partners, who employ no other workers, subject to the hour and wage provisions of the Soap and Glycerine Code?

Answer: No.

Facts: We have approximately twenty-seven employees in our soap factory, but do not know what limits to place on the hours of the following employees, described as "A" and "B":

"A" is employed as an office executive and receives $102.50 per month. He has charge of approving the orders in the office, does all the purchasing, and acts, under the supervision of the manager, in directing both office and factory employees.

"B" has complete charge of shipping and also supervises the packing of all orders. He is paid $88.00 per month and is directly responsible to the manager of our company.

Both employees act in the capacity of assisting the manager in directing and supervising the work of others.

Question: How many hours per week are employees "A" and "B" permitted to work?

Answer: In accordance with the provisions of Article III, Section A-2 of the Code, not in excess of 48 hours.

◆

Wackman Welded Ware Co., St. Louis, has just completed negotiations for the acquisition of the steel drum plant of H. H. Ward Co. at Chester, Pa. Alteration and enlargement of the plant will be begun immediately and production of the Wackman line will start about the middle of June. This new step affords Wackman Welded Ware Co. an eastern seaboard location for the manufacture of its complete line of steel drums and other containers. Other plants are located at St. Louis, North Kansas City, New Orleans, Houston, and Sand Springs, Okla.

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Denatured)

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Teaseed Oil
Castor Oil
Sesame Oil
Lard Oil
Palm Oil
Corn Oil
Peanut Oil
Grease (Animal)
Tallow
Red Oil
Soap Colors
Chlorophyll
Soda Ash
Sal Soda
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PRODUCTION SECTION

A section of SOAP devoted to the technology of oils, fats, and soaps published prior to Jan. 1, 1932, as a separate magazine under the title, *Oil & Fat Industries.*

Superfatted Shaving Soaps

SENSITIVE skins are afforded a measure of protection by superfatted shaving soaps which may be in the solid, cream or liquid form. The only feasible method of obtaining superfatted shaving soap powders is to use a comparatively large proportion of talcum and this reduces lathering ability. Superfatted shaving soaps demand more careful selection of fatty raw materials than superfatted toilet soaps. Free stearin is frequently recommended, one to three per cent improving the stability and compactness of the lather. Unfortunately these soaps may induce a skin-irritant action. Free ricinoleic and oleic acids are certainly not desirable. Manufacturers should also avoid soaps which contain an excess of readily decomposed fat such as tallow or coconut oil. Such soaps are very irritating if rancidity develops.

Fat emulsifiers should be added judiciously, as too much removes more fat from the skin than soap alone, and thus tends to counteract the effect of superfatting. A small amount of a type of emulsifier like lecithin, cetyl alcohol, stearyl alcohol and other fatty alcohols, glyceryl monostearate, glycol stearate etc. is sometimes an advantage, as they increase lathering power.

The most important superfatting ingredients commonly used in shaving soaps are lanolin and vaseline. Vaseline reduces lathering power more than lanolin, but at the same time it forms a protective film during shaving without softening the skin. Spermaceti, ceresine, paraffin, beeswax, and very small quantities of cholesterol or its derivatives function as good superfatting agents when suitably applied. Wool fat alcohols can also be used. When sufficient fatty substance is present the addition of a small quantity of emulsifying agent is permissible, such as triethanolamine stearate, turkey red oil, sodium cholate and other substances which are more or less tolerated by the human skin. A large proportion of coconut soap added to improve lathering power is inadvisable, as this more than counteracts the effect of the superfatting agent.

A fatty substance of a unique character is trolhetta oil, which may be regarded as a liquid wax, undergoing no decomposition in soaps. It can be incorporated with liquid soaps if their concentration is 20 per cent or higher. It will form a clear liquid with fair stability at low temperatures. In this respect it differs from other fatty oils, but resembles essential oils like pine oil and lavender oil. When present in considerable amounts, it seriously reduces lathering power.

For making solid milled shaving soaps, the procedure is to melt together 2 kg. of lanolin, 0.2 kg. of wool wax, and 0.3 kg. of cetyl alcohol. The lukewarm melt is introduced into 97.5 kg. of dry soap shavings with the simultaneous addition of perfume, and milled several times. A shaving soap with a very mild action is based on 85 per cent stearin and 15 per cent coconut oil, this mixture being saponified with a lye consisting of 5 parts of caustic potash (50°Bé.) and 1 part of caustic soda 38°Bé.) with the addition, if required, of a little water. Two to 3 kg. of the soap shavings may be replaced by triethanolamine stearate, also in the form of shavings.

Shaving creams containing about 45 per cent fatty acids undergo a marked thickening after the addition of small amounts of superfatting agents, and are then difficult to squeeze from the tube. Shaving creams are preferably superfatted with a mixture of 1 kg. of lanolin and 3 kg. of trolhetta oil. Rather more than the normal quantities of coconut soap and glycerine are here desirable.

Liquid shaving soaps may contain 2 per cent of trolhetta oil in order to retard thickening. If a transparent preparation of this type is desired, a high content of glycerin and alcohol and about 4 per cent of trolhetta oil are essential in conjunction with relatively little coconut-potash soap.

Non-lathering shaving creams which dispense without brush and water may contain appreciably more superfatting agents, since the reduction in lathering power need not be considered. J. Augustin. *Manufacturing Chemist* **6,** 77-8 (1935).

VARIATION IN SULFONATION REACTION

The action of fuming sulfuric acid, chlorosulfonic acid, and concentrated sulfuric acid on castor oil, and some other unsaturated oils was investigated at lowered temperatures, in the presence and absence of various solvents and dehydrating addition agents. In almost every case except with concentrated sulfuric acid without addition agents, the formation of reaction products which do not split off sulfuric acid when boiled with mineral acid, was observed. These products could easily be separated from other fatty substances such as ordinary sulfuric esters, fatty acids, etc., by treating the reaction product with ether after boiling with hydrochloric acid.

The compounds belonged to the class of true sulfonic acids of fatty acids. The free acid and the sodium salts are both very soluble in water, alcohol and acetone. When the aqueous solution is treated with inorganic neutral salts such as sodium chloride or sodium sulfate, an acid salt is readily formed. The alkali salts are very hygroscopic and their aqueous solutions are neutral, unlike soap solutions, and have superior wetting, emulsifying, foaming and hard-water-resisting properties. The compounds are very stable when boiled with mineral acid.

In sulfonating castor oil with concentrated sulfuric acid, the sulfonation reaction proceeds far more rapidly than the hydrolysis, this difference becoming more marked with larger amounts of sulfuric acid and at lower temperatures. The action of sulfuric acid on the double bond of ricinoleic acid is not as slow as has been generally thought; the iodine numbers decreased to almost half of their original value.

The reaction velocities of the combination between olive oil and concentrated sulfuric acid, as well as hydrolysis, appear to be far more rapid than with castor oil. A lower reaction temperature and greater amounts of sulfuric acid were indicated. However, this resulted in the formation of a very viscous mass involving difficulties in agitation, with undesirable local side reactions. Therefore a suitable diluent should be used. Kinjiro Winokuchi et al. *J. Soc. Chem. Ind., Japan* **38,** Suppl. binding 25-32 (1935).

To identify hydrogenated fish oils, apply the following test: Dissolve 2.5 cc. of melted fat in a 1:1 mixture of chloroform and glacial acetic acid. Treat with 1 cc. of a 10 per cent by weight solution of bromine in chloroform and let stand. With a hydrogenated marine animal or fish oil, the rose color gradually changes after a few minutes to a deep purple, which remains unaltered for a long time. Pure hydrogenated vegetable oils give under these conditions either no color or a green or greenish-yellow color. With mixtures of hardened vegeable and marine oils, the characteristic purple color is perceptible in the presence of as little as 5 per cent of the latter. The non-hydrogenated non-marine oils tested gave a yellow to brown color. M. N. Ghose and H. K. Pal. *Analyst* **60,** 240-1 (1935).

PERFUME-COLOR FOR SHAVING CREAM

There appears to be no good reason for tinting shaving cream as the usual white or off-white has found wide acceptance. The exception is the case of the manufacturer who has a tinted toilet or complexion bar that he desires to tie his shaving cream to. This consideration justifies the red cream and red carton and tube of one manufacturer. It does not justify such a vivid, artificial "rat poison" green of another, however, which is repulsive to the average shaver and an insult to his intelligence, says Ralph C. Auch, well-known chemist.

When the small cosmetic manufacturer is at a loss to know what odor to use in his cream, he chooses any odor "just so long as it is rose." Rose is safe. The shaving cream manufacturer may use any odor of high or low cost to suit. If he cannot decide, then lilac is always equally safe. He should use his choice sparingly and it should preferably be relatively fugitive, that is, not too lasting.

Here is a lilac usable as it is, is easy on the purse and is one that may be modified to suit the individual need or whim:

Lilac Perfume

	Per Cent
Anisic Aldehyde	10
Jasmin Synthetic	10
Heliotropine	5
Phenyl Ethyl Alcohol	5
Phenyl Acetaldehyde	5
Oil Bergamot	3
Musk Ketone	3
Styrax Resin	2
Oil Ylang Ylang	2
Terpineol	55
To Make	100

Individual touches may be imparted to the above by the sparing use of any or all of the following: amyl salicylate, acetophenone, methyl anthranilate, benzyl acetate, cinnamic alcohol, benzyl benzoate, hydroxycitrenellol, and oil nutmeg.

A composition of a transparent glycerine soap is as follows: 20 kg. coconut oil, 18 kg. tallow, 12 kg. castor oil, 25 kg. caustic soda (40°B'e.), 10 kg. glycerine, 10 kg. sugar, 15 kg. water heated to 60°C. for solution of the above. The mixture is congealed by the addition of crystalline soda ash or a 15°B'e. solution of one-third potash, one-third soda ash and one-third salt.. After standing for some time, the mixture is colored and perfumed and run into forms. *Seifensieder-Ztg.* **62,** 236-7 (1935).

A detergent compound is made by utilizing the waste liquors of ester-oil sulfonation. These liquors are mixed with a quantity of soda ash greatly in excess of that required to neutralize the acids in the liquor, a soluble oil is added and the resulting product ground. The waste liquors contain water, sulfuric acid, glauber salts, glycerine and probably minor amounts of sulfonated oil and sulfonic acid salts. Ernest F. Drew. Canadian Patent No. 349,671.

Antiseptic Soaps

THE germicidal action of soap alone is relatively low because of the low solubility of soap in water. The addition of common antiseptics to ordinary soap is well-known practice. The composition of such soaps is discussed in a recent issue of *The Perfumery and Essential Oil Record*. Phenols were among the earliest to be used in disinfectant soaps. A toilet soap should not contain more than about 3 per cent of phenols in order to avoid the possibilty of skin irritation. Household soaps may contain up to 5 per cent. Phenols have a softening effect on soap which is increased by their hygroscopic nature. It is therefore desirable to dry these soaps well and to market them in a moisture-proof pack. The view generally expressed by soap chemists is that the antiseptic action of phenol is very small when used in soap, even in relatively large quantities.

Cresols have a stronger antiseptic action than phenol, besides being less corrosive. Commercial cresol is a mixture of the three isomeric methyl phenols. It darkens quickly on standing. Cresols are cheaper than phenols. Although cresol is difficultly soluble in water, it dissolves readily in potash soaps, the resulting mixture being miscible in all proportions with water.

An odorless phenolated soap can be made by mixing in about 3 per cent of a fatty acid phenol ester such as phenyl stearate, palminate or oleate. These esters are non-irritant to the skin and stable to alkalies. Iodine has been used in soaps. It does not have a very active antiseptic action when in the form of its compounds and is therefore employed as a solution in alcohol or in potassium iodide. Iodide is not stable however, as may be seen from the fact that soaps containing it change from brown to a light yellow in a short time. A better way of introducing iodine into soap is to add it in the form of a compound with an unsaturated acid such as oleic. A large number of so-called iodine soaps are made with potassium iodide and are quite stable, although they are not really iodine soaps.

Sulfur is a useful therapeutic for certain skin troubles. Its action is due to a mild antiseptic effect combined with reducing properties. Sublimed sulfur is generally used. The difficulty of getting sulfur into the water-soluble form may be overcome by using a combination of certain terpenes with alkaline sulfides and polysulfides. The solution of the clear brownish liquid in water gives a white emulsion with a slight alkaline reaction. It is non-irritant. A tar-sulfur soap is widely sold for the treatment of a variety of skin diseases. It is a brown soap prepared by dissolving 2 pounds of potassium sulfide in a small amount of water, and adding 20 pounds of yellow stock soap together with 4 pounds of birch tar oil. The mass is milled several times.

The manufacture of soap incorporating mercury or corrosive sublimate is not an easy matter. The mercury salt reacts rapidly with the soap to form complex insoluble compounds. An improved process for incorporating mercury makes the soap contain an excess of free fatty acid, which prevent the chloride from reacting with the soap. In another process, the mercury salt is mixed with an alkaline casein solution, forming a mercury albuminate soluble in alkali.

Mercuric iodide is used in some soaps. It is best added by mixing 4 parts of mercuric iodide with 3 parts of potassium iodide and 2 parts of water, then incorporating the precipitated salt with the milled soap. The method of using non-ionized complex mercury compounds is one that shows promise. These compounds give no black precipitate on addition of ammonium sulfide in the cold. Those which give no precipitate on prolonged standing are the best suited for the purpose.

—— ♦ ——

Frothing agents soluble in water are prepared by treating secondary or tertiary amines of the general formula RNXR'G with ammonia or organic substitution products of ammonia or with sulfonating or sulfiting agents. In the general formula, R is an aliphatic or hydroaromatic radical of high molecular weight, X is hydrogen, R' is an aliphatic radical and G contains a reactive group such as hydroxyl or a derivative thereof. Henkel & Cie G. m. b. H. French Patent No. 774,087.

—— ♦ ——

Sulfuric esters of aliphatic alcohols in which the sulfo group is attached to the oxygen atom can be determined readily by the Herbig method, but condensation products, like Adulcinols and Igepon, in which the sulfo group is attached partly or fully to a carbon atom, cannot be decomposed completely by splitting with acid. In the latter case, only a part of the fat content is liberated by the acid. The remainder can be determined by extracting with butanol. E. Swindells. *Dyer* **73,** 120-1 (1935).

—— ♦ ——

A cleansing product is composed of a sulfonate obtained from acid mud and a detergent agent which is an alcohol sulfate of paraffin wax or a simple alcohol sulfate. Standard Oil Development Co. French Patent No. 771,216.

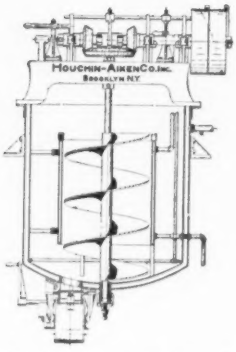
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Products useful as wetting and dispersing agents are prepared by converting into sulfonic acids or sulfuric esters, or salts of either, sulfate of formula RSO_2R', where R is an aromatic radical and R' an aliphatic radical containing at least 8 carbon atoms. For example, sodium p-toluenesulfinate is heated in alcohol with ethyl 9-bromolaurate and the product is sulfonated with chlorosulfuric acid and fuming sulfuric acid. Soc. pour l'ind. chim. a Bale. British Patent No. 415,877.

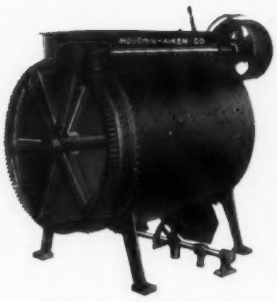
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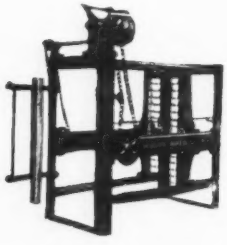
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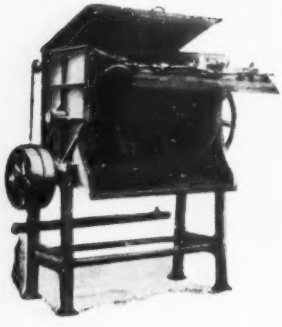
Standard
Soap Frame



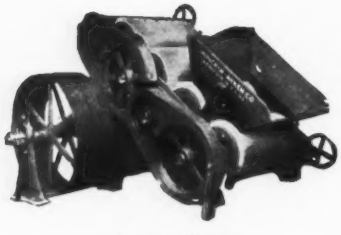
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Slabber



Automatic Power Cutting
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Plodders furnished with 2½"
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HAWTHORNE, NEW JERSEY

DETERGENTS FOR RAW WOOL WASHING

The removal of the fat from wool may be accomplished by means of soap or solvents, or more usually by a combination of the two. Both solid and liquid potassium soaps are in favor. The quantity of soap necessary in the washing process is reduced to about half by using a mixture consisting of 90 per cent trichlorethylene, 4 per cent water, and 6 per cent ammonium oleate. Other efficient solvents are cyclohexanol and methylcyclohexanol. In practice cyclohexanol is usually employed in admixture with potassium oleate or ammonium oleate soaps. Methylcyclohexanol is used in conjunction with the potassium salts of the fatty acids of linseed oil or rapeseed oil. In all cases, the best cleansing action results when an additional solvent such as carbon tetrachloride or benzine is added, since any one specific solvent does not extract completely all of the heterogeneous matter from the raw wool. Both the cyclohexanol and methylcyclohexanol soaps are very efficient in eliminating the suint and resinous matter from the wool. When diluted with water in the wool-washing machines, they do not give a turbid solution.

A liquid soap containing about 80 per cent of turpentine is also on the market. This solvent is added through an atomizer and prevented from separating from the soap by adding about 2 per cent of a vegetable gum such as gum arabic. Solid soaps containing solvents are sometimes preferred. These are prepared by saponifying either coconut oil or tallow, or the fatty acids of either, with caustic potash and caustic soda, then adding the solvent during the soap-crutching process. In the case of cyclohexanol, the solvent may be added, up to 10 or 12 per cent, before saponification of the fats.

In general, the use of organic solvents in addition to the soaps tends to facilitate the recovery of the wool fat from the wash water. The effluent from wool scouring in which soap alone has been used is very erratic in its behavior when treated with a mineral acid for the recovery of the fat. Sometimes the fat will come to the surface, but very often it will partly settle out to the bottom of the vessel and partly remain in suspension in the acidified effluent. The effect of the solvent is to increase the buoyancy of the fat, and so raise it to the surface without any loss from suspended particles. On the other hand, a fat recovered by scouring with a soap containing much solvent has not the same quality as a fat produced from soap treatment alone, for the solvent extracts coloring matter and non-fatty substances with the fat.

The concentration of soap and solvent in the bath is regulated according to the variety of wool, its fat content, and the results desired. Generally, several baths having different concentrations of soap, solvent, or a mixture of the two, are simultaneously in use. If, after preliminary steeping or washing in water to free it from water-soluble matter, the wool is placed in a bath at a temperature of about 45° C. containing from 2 to 3 per cent of a solvent, the bulk of the suint and coloring matter may be extracted. The wool fat itself may be removed by a soap and solvent washing in a bath of 1 to 2 per cent strength at a temperature of between 50 and 55°. In this way both the fat recovered and the treated wool are much lighter in color. *Chemical Trade J.* **95,** 292.

◆

In a study of water softening it has been shown that sodium aluminate is effective in removing magnesium from water when the amount present is as little as that equivalent to 2 parts of calcium carbonate per 100,000, whether the hardness is permanent or temporary in character. During the softening of calcium hardness by sodium carbonate, precipitation of calcium carbonate is more effectively promoted by an excess of caustic alkalinity which is provided by a mixture of calcium hydroxide and sodium carbonate rather than by sodium hydroxide. This effect is attributed to the inducement of crystallization by nuclei of calcium carbonate formed. A similar effect is noted when calcium hydroxide is used to precipitate calcium from a solution of calcium bicarbonate, for in such a reaction, the rate of precipitation is greater than when sodium carbonate reacts with calcium chloride solution. L. M. Clark and P. Hamer, *J. Soc. Chem. Ind.* **54,** 25-8T (1935).

◆

Discoloration of animal or vegetable oils or fats on exposure to air and light is prevented by incorporating not more than 0.05 per cent of colloidal copper, cobalt, cadmium or silver, or of the carbonate of cobalt, copper, lithium, manganese, cadmium, barium, bismuth the nitrate of calcium, berillium, or lithium, the acetate of sodium, copper, manganese, the hydroxide or cobalt, berillium, copper, thorium or of a mixture of cobalt carbonate and copper carbonate with or without bismuth subcarbonate. Allen D. Whipple. British Patent No. 410,834.

◆

Agents for increasing the wetting power of mercerizing solutions comprise mixtures of sulfuric acid esters of cyclic alcohols, emulsifying agents effective in alkaline medium and, if desired, solvents containing one or more alcoholic groups. For example, a solution of sodium methylcyclohexylsulfate in water is mixed with a sulfonated oil and added to a mercerizing bath. Soc. pour l'ind. chim. a Bale. French Patent No. 774,748.

◆

To detect "sulfur oil" in olive oil, dissolve in chloroform and shake with an alcoholic solution of silver nitrate and triethanolamine. The reduced silver forms silver sulfide, which colors the chloroform layer yellow-brown. Acids must first be removed from the oil. D. Jaffe. *Industria chimica* **9,** 890-4.

◆

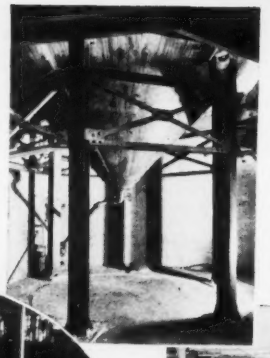
A composition for cleaning walls, paint etc. contains 455 parts of corn flour, 40 parts of copper sulfate, and 5 parts of alum. It is mixed with boiling water for use. Pierre Weber. French Patent No. 774,876.

Three Practical Ways to KEEP Soap CLEAN



• *Typical installation of steel soap boiling kettles with top sections lined with light gauge Monel Metal sheet. This is one way that any soap plant can greatly improve existing equipment.*

How the danger of contamination in boiling kettles can be lessened or completely avoided!





• *Two views of a 15' diameter x 29' high soap boiling kettle built entirely from 3/8", 1/4" and 7/16" thick Nickel-Clad Steel, with welded and riveted construction. Heating coils and discharge spout are solid nickel. The butterfly covers are also Lukens Nickel-Clad Steel. This kettle was built by Southwest Welding and Manufacturing Company, Alhambra, California, for a large manufacturer of fine toilet soaps.*

MANUFACTURERS of high grade soap, who refuse to accept caustic soda that contains more than 25 parts of iron in a million, are taking equally sensible precautions in their various processes.

Soap, in the kettle, is being protected against discoloration—its purity maintained—and subsequent effects of impurities on perfumes and keeping qualities are minimized.

One method used is to line the top sections of iron or steel kettles with light gauge Monel Metal sheet to a point below the liquid level. Monel Metal is also used for covers. This provides an economical way to eliminate that large part of the rusting and corrosion which occurs at the air-liquid level, in the upper section of the kettle.

Another method, frequently being followed with new installations, is to build steel kettles with top sections and covers of Nickel-Clad Steel.

A third method, and one being more and more frequently adopted by makers of high grade toilet soap is to install kettles made entirely of Nickel-Clad Steel. These kettles are of welded and riveted construction and are equipped with either pure nickel or Monel Metal steam coils, outlet valves, swing piping and fittings.



• *Two steel soap boiling kettles built with top sections and covers of Nickel-Clad Steel. These are all-welded kettles built by Littleford Bros. of Cincinnati, Ohio, who have also built a number of large all-Nickel-Clad Steel boiling kettles for high grade soaps.*

Both Monel Metal and nickel are highly resistant to corrosive action of caustic soda, fatty acids and salt. That fact accounts for the wide application of both metals in the soap industry.

Send for any or all of the following free bulletins: "Nickel and Monel Metal in the Manufacture of Soap"; "Methods for the Fabrication of Nickel-Clad Steel"; "Lukens Nickel-Clad Steel in the Process Industries". Write to

THE INTERNATIONAL NICKEL COMPANY, INC., 67 Wall St., New York, N. Y.

Monel Metal ("Monel" Metal)

Monel Metal is a registered trademark applied to an alloy containing approximately two-thirds Nickel and one-third copper. Monel Metal is mined, smelted, refined, rolled and marketed solely by International Nickel.

NRA CODE

ON PRODUCTS AND PROCESSES

The lasting qualities of a toilet soap depend on hardness. A method for determining the hardness of a piece of soap consists in placing a case-hardened steel rod 10 mm. in diameter in contact with the cake of soap and applying to the rod a standard pressure of 100,000 grams. The number of seconds that the rod takes to penetrate 10 mm. of the soap is regarded as the "hardness coefficient" of the soap. For facilitating the test the rod is calibrated on the outside in millimeters. S. Dutta. *Indian Soap J.* **1,** 198 (1935).

♦

Cleansing, foaming, and emulsifying agents are prepared by treating a secondary amine with an alkylating agent and a benzyl halide, and sulfonating the resulting quaternary ammonium salt. In a modification, the final step is avoided by using a sulfonated benzyl halide. An alkyl radical containing at least six carbon atoms must be introduced by the alkylating agent. Imperial Chemical Industries, Ltd. and Henry A. Piggott. British Patent No. 419,942.

♦

Cleansing compositions which generate active chlorine are made by dissolving chloroamides or dichloroamides in heated fatty acids such as caprylic acid or lauric acid, and grinding the solidified product with an alkaline salt or oxide, for example, soda ash, sodium silicate, sodium bicarbonate or sodium borate. Soc. Chlorosoda. French Patent No. 766,576. Chloroamides containing a phenolic group are made by treating *p*-phenolsulfanide with an alkali hypochlorite. Soc. Chlorosoda. French Patent No. 766,578.

♦

Tests on soap wrapping materials show that vegetable parchment paper and A-P paper have a reasonably satisfactory resistance to alkali. Newsprint paper is entirely unsuitable. Blue ink on blue-printed wrappers is resistant to alkali and to contact with freshly cut soap. Green ink is not resistant to freshly cut soap but is reasonably alkali-resistant. L. F. Hoyt. *Oil and Soap* **12,** 48-51 (1935).

♦

Wetting and Cleansing agents are produced from oxidation products of higher aliphatic hydrocarbons which are freed from acids and unoxidized hydrocarbons, and the residual neutral oxidation products are sulfonated. I. G. Farbenind. A.-G. German Patent No. 608,362.

♦

Stable emulsions of fats with water may be produced by the addition of powdered pectic material, hemicellulose or other jelly-like plant matter. Tres Gyogyszer-Vegyeszeti Ipari. Hungarian Patent No. 110,097.

Floating soap is produced by adding hydrogen peroxide to ordinary soap during the manufacturing process. Lilian F. Wilcox. Australian Patent No. 14,431.

♦

A solution of an alkali metal silicate is mixed with a solution of soap and afterward an acid is incorporated such as boric acid, or a solution of an acid salt capable of precipitating the SiO_2 in a gelatinous form. An exception is the inclusion of fatty acids or sulfonated fatty acids or their salts. Rubber latex may be mixed with the silicate solution before mixing it with the solution of soap. John W. Battersby. French Patent No. 774,512.

♦

Measurements of pH show that the hydroxyl-ion concentration of dilute soap solutions containing added caustic soda or soda ash is less than that corresponding to the added alkali alone. The authors' interpretation of their results is that hydroxyl-ions, derived either from hydrolysis or added alkali, and fatty acid-ions are absorbed by certain constituents of the soap solution. A determination of free hydroxyl-ion is therefore not a true measure of the amount of soap hydrolyzed, which is always more than that calculated from the pH of the solution. The adsorption of hydroxyl-ion by a soap solution of given concentration increases with the amount of added alkali until a certain pH is attained, after which it suddenly falls. The critical pH and the amount of added alkali which is needed to produce it depend on the nature of the soap. B. Tyutyunnikov and N. Kas'yanova. *Allgem. Oel-und Fett-Ztg.* **31,** 276-9.

♦

Physical properties of soaps may be improved by addition of gelatins, glues, lichens, gums, caseins, artificial resins, starches, sugars, cellulose, higher alcohols, etc. Victor Boulez. French Patent No. 774,156.

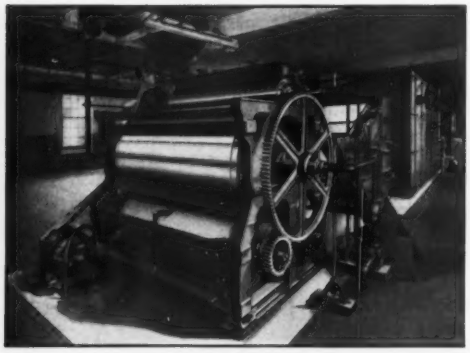
♦

Many of the commonly occurring microorganisms are able to decompose fats with the formation of aldehydes and free acids. Rancidity of fats may thus at times be due alone to bacterial action. A Seduikh. *Bull. State Inst. Agr. Microbiol* (U. S. S. R.) **5,** 299-313.

♦

When oxygen is passed through cod-liver oil at 75°C. and the oxidation is followed by determining the acidity of the oil, the curve is practically horizontal for the first three hours, which represents the saturation of double bonds, and then rises sharply. Addition of antioxidants prolongs the induction period or decreases the slope of the curve. The method showed that guaiacol, and especially maleic acid, have a marked antioxidant action. A test can be completed in 5 to 8 hours. Marcel Mottier. *Arch. sci. phys. nat.* **16,** 139-43.

PRODUCING THE PERFECT CHIP FOR ALL SOAP MAKING NEEDS



● New Type Proctor Chip Soap System producing extremely thin chips of textile soap in new plant of Original Bradford Soap Co., River Point, R. I.

● The New Proctor Chip Soap System produces the thinnest of chips . . . chips perfectly formed in long ribbons, evenly thin from edge to edge, uniformly dried free from hard overdried particles or underdried spots. These chips make cleaner, whiter,. quicker-dissolving laundry flakes. They make smooth-surfaced, clear-colored toilet cakes. They give quicker, better milling and plodding. They give quicker, easier grinding into powdered soaps . . . with less loss in dust. New high speed chilling roll . . . spray-cooled, pump-drained, precision-ground, smooth-surfaced. New drying machine . . . with revolutionary improvements in principal details of design . . . more efficient, more economical, cleaner in operation. Write for your copy of our new descriptive Bulletin No. 72.

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TRADE REVIEW

SOLVENTS IN SOAPS

Certain chlorinated hydrocarbons assist solubility and increase detergent action by their grease-removing properties. In this category can be placed such substances as dichlorethylene, trichlorethylene, carbon tetrachloride etc., says the *Soap, Perfumery & Cosmetics Trade Review*, 8, No. 3, 1935. These have the advantage of being non-inflammable, non-combustible and non-explosive. Hydrogenated aromatic substances such as cyclohexanol (hexalin), methyl cyclohexanol (methyl hexalin) and tetrahydronaphthalene (tetralin) are also used. These solvents when used in correct amounts will give clear soap solutions or clear jellies which are conveniently mobile. Preparations of an emulsion type are made by using a volatile solvent such as some fraction of petroleum naphtha or benzene, toluene, xylene etc. and emulsifying with soap or turkey-red oil. Ammonium oleate is used for this purpose. By emulsifying with vegetable mucilage it has been claimed that it is possible to incorporate as much as 75 per cent of the solvent in a soap. In nearly all cases these solvents assist as wetting-out agents, but impair the lathering ability of a liquid soap. The following are made with a type of soap suitable for a liquid product:

	%
1. Soap	35
Cyclohexanol	10
Water	55
2. Soap	30
Trichlorethylene	25
Water	45
3. Soap	28
Trichlorethylene	10
Water	60
Potassium carbonate	2

	%
4. Soap	5
Ammonia (0.880)	25
Cyclohexanol	10
Water	60
5. Soap	10
Ammonia (0.880)	5
Tetralin	10
Water	75

COMMENTS ON USE OF STRONG LYES

Commenting on the short article on the defense of the use of strong lyes which appeared in the April issue of SOAP by Julius Schaal, the following has been received from George Becker of St. Paul: "In your April number on Page 63 you have an article "Defends Use of Strong Lye." This is not new. I have been making soap for the past year using only strong lye and have had very good results. With a tallow charge of eight to eleven thousand pounds, it took only two hours to saponify the stock completely with very little steam. The product is a 90 per cent tallow and 10 per cent coconut chip base for laundry use. Enclosed you will find the duplicates of some laboratory test reports." These reports show in one case anhydrous soap of 87.7 per cent, free alkali of 0.1 per cent and unsaponified matter of 0.1 per cent. Another shows unsaponified of only a trace. A third shows unsaponified of 0.3 per cent.

Animal and vegetable oils may be separated from water without emulsification by introducing such oils containing water, for example, olive oil, into the bowl of a centrifuge under pressure. Aktiebolaget Separator. French Patent No. 774,102.

ENGLISH SOFT SOAP MANUFACTURE

Soft soap normally contains 40 to 44 per cent of fatty acids. The best method of saponification is to take the calculated quantities of alkali sufficient to effect complete saponification, with an excess of 1 to 1.5 per cent alkali, according to English practice. The caustic solution, preferably of a density of 30°Tw. (about 19°Be.), is brought to a boil and the melted charge added as quickly as possible without the contents frothing over. Emulsification follows with rapid saponification. The process is usually complete in a few hours' time, water being added when necessary. If rosin is to be incorporated, it is best added toward the end after the other stocks have been saponified.

A soft soap charge cannot be worked with caustic soda alone unless castor oil is present. Castor oil will form a soft soap with caustic soda, and with the substitution of varying proportions of caustic potash for caustic soda, soft soaps can be made with castor oil in which varying proportions of other stocks have been introduced. Saturated fatty acids tend to give stringy soap even with potash. The higher these are in the homologous series, the more pronounced is the stringiness.

The percentage of caustic soda which can be substituted for caustic potash will depend on the percentage of castor oil introduced into the blend. Practical experiments indicate that about 2 per cent of caustic soda can be substituted for caustic potash for every 1 per cent of castor oil introduced into the blend. Use of caustic soda in this way does not affect translucency and gloss.

Linseed-soda soap is stringy, but the corresponding potash soap is non-stringy with a desirable body. Peanut oil-soda soap is stringy but the potash soap is not. The following blends suggest the possibilities for soft soap manufacture:

1. The charges given below produce a stringy soap with 80 per cent caustic potash and 20 per cent equivalent caustic soda, but have the right non-stringy body with caustic potash only:

(a) Peanut oil 20 parts, linseed oil 50, cottonseed oil 20, tallow 5 and rosin 5.

(b) Peanut oil 20 parts, linseed oil 50, cottonseed oil 20 and tallow 10.

(c) Linseed oil 60 parts, cottonseed oil 30 and rosin 10.

(d) Linseed oil 65 parts, cottonseed oil 25, rosin 10.

2. Linseed oil 67 parts, peanut oil 13, cottonseed oil 10, tallow 5 and rosin 5 can be used with 80 per cent of caustic potash and 20 per cent equivalent caustic soda to give an almost non-stringy soap with only a slight thready tendency.

3. Linseed oil 73 parts, cottonseed oil 15, rosin 10 and coconut oil 2 can be used with 70 per cent of caustic potash and 30 per cent equivalent caustic soda to give a non-stringy soap. In general it is preferable to use more potash. This represents the lower limit of potash with this type of blend.

4. Linseed oil 73, castor oil 20, rosin 5 and coconut

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oil 2 gives a correct non-stringy soap with 60 per cent caustic potash and 40 per cent equivalent caustic soda, due to the introduction of castor oil.

The following blends with higher percentages of castor oil give non-stringy soap with caustic soda alone:

(a) Linseed oil 38, castor oil 50, coconut oil 2 and rosin 10 parts.

(b) Linseed oil 32, castor oil 45, coconut oil 3 and rosin 20 parts.

(c) Linseed oil 50, castor oil 35, coconut oil 3 and rosin 12 parts.

R. L. Datta and P. K. Ghose. *Soap, Perfumery and Cosmetics Trade Review* **8,** No. 3, 18-20 (1935).

—— ♦ ——

In the determination of inorganic sulfate in sulfonated oil, a better separation was obtained if the solution of oil in ether and salt solution was neutralized with 0.1 *N* hydrochloric acid before shaking out in the separatory funnel. In the determination of free fatty acid in ammonia oils, the following method gave much better results than boiling off the ammonia: Dissolve five grams of oil in ether, acidify with hydrochloric acid, shake out with concentrated salt solution until neutral, then take up the ether solution in alcohol and titrate. C. Riess. *Collegium* 644-7.

—— ♦ ——

Glycerine obtained from fat splitting is recovered by treatment with barium carbonate to neutralize sulfuric acid, with aluminum sulfate to remove albuminous matter, with barium hydroxide to precipitate the lower fatty acids, and with ammonium sulfate to reduce the ash content. The loss of glycerine in evaporation in open vessels may be 25 per cent, but by evaporating *in vacuo*, this loss is 2 per cent or less. R. B. Dutt. *Indian Soap J.* **1,** 163-4 (1935).

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The darkening of rosin soaps is due to the presence of unstable acids. These can be removed in part by salting out. Soaps prepared from gum rosin have a better color than those from wood rosin. These acids can also be removed by boiling the soap solution and simultaneously blowing with air and then salting out. F. Solodkii. *Lesokhimicheskaya Prom.* **3,** No. 7, 26-9 (1934).

—— ♦ ——

Determination of dirt in rosin by soap makers by means of toluol insoluble material present is recommended by the Hercules Powder Co. in a recent communication. The company states that toluol insoluble should form part of every rosin analysis. It also states that the maximum dirt in Hercules pale wood rosins by this test is only four-thousandths of one per cent.

—— ♦ ——

Emulsifying and washing agents are produced by sulfonating mixtures of fats or fatty acids with mineral oils of high boiling point in the presence of a dehydrating agent such as phosphorus trichloride. Oranienburger chem. Fabrik A.-G. German Patent No. 607,018.

SOAP-STABILIZED EMULSIONS

The kind of dispersion to be expected from a given method of making an emulsion can be determined by a size-frequency analysis of the globule distribution. Since the quality and behavior of an emulsion depend mainly on the degree of dispersion, such an analysis becomes of considerable importance.

Emulsions of olive oil dispersed with sodium oleate, and peanut oil dispersed with potassium oleate were prepared in different ways, and the results studied by means of this method. Size-frequency analyses showed that the dispersion of this type of soap-stabilized emulsion is improved if the soap is allowed to form *in situ* during the emulsification process. This is accomplished by having the requisite amounts of alkali and fatty acid present in the water and oil respectively, before mixing. Such emulsions tend to form spontaneously and require comparatively little homogenization.

A further improvement occurs when the emulsions are made in a mechanical emulsifier. The reason appears to be due to the fact that such an emulsion is made in piecemeal fashion. Small quantities of the two phases are subjected in succession to the full effect of the machine, with the consequence that every portion in the end had received the same treatment. R. Dorey. *Can. Chem. and Met.* **19,** 17 (1935).

—— ♦ ——

The stability of fatty oil-water emulsions is increased by the addition of soy-lecithin and the purer the lecithin the greater the stability. Experiments made with sodium soap solutions of oleic, palmitic and stearic acids showed that the addition of lecithin had the following effects: The surface tension of the solutions increased. Drop numbers against kerosene increased in low concentrations of soap solutions, but decreased in concentrations above 0.25 per cent. Foam number and foam stability increased. Turbidity and transparency temperatures of the solutions were lowered about 3-5° C. T. Inaba, K. Kitagawa and M. Sato. *J. Soc. Chem. Ind., Japan* **37,** Suppl. binding 595 (1934).

—— ♦ ——

Wetting agents have been rather indiscriminately named and classified in the past. From the point of view of indispensability there is really only one class. This can be subdivided for specific applications as follows: (1) cresol-base preparations for cotton mercerization, (2) pyridine bases to avoid bronzing effect on wool, (3) substituted sulfonated naphthalene derivatives for thick fabrics and (4) fatty alcohol sulfates. J. Pinte. *Rev. gen. mat. color.* **39,** 24-7 (1935).

—— ♦ ——

Potato starch is suggested as a filler for soap in Germany. Formulas for curd soap, cold-process soap, soap powder and liquid soap include it. For example a curd soap is prepared by mixing 80 parts of hot soap stock with 10 parts of industrial starch and 10 parts of a potassium chloride solution of 12-13°Be. Soluble starch is used in liquid soap. Karl Braun. *Seifen-, Oel- and Fett-Ind.* **21,** 62-3 (1935).

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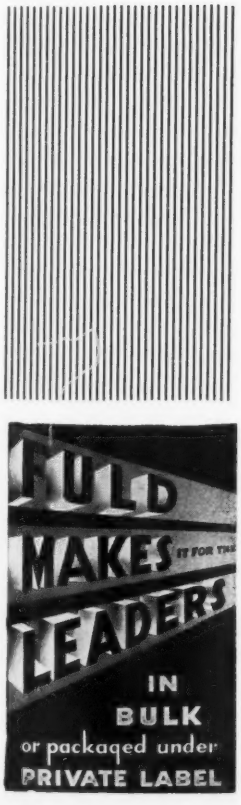
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An interesting conversation in one scene between a Foreign Exporter and an American Importer of Pyrethrum Flowers

The scene takes place in the office of the American Importer. The transcript here given is based on an actual conversation.

Foreign Exporter: Why, all the flowers I sold to two houses in America were guaranteed to contain 1% pyrethrins or more.

American Buyer: Then you must have laboratory facilities in Japan.

Foreign Exporter: Not at all, why should I?

American Buyer: You said you guaranteed your flowers to contain 1% pyrethrins. How can you do that without a laboratory?

Foreign Exporter: That's simple. Everybody does it.

American Buyer: Tell me, how do you arrive at the figure of 1%?

Foreign Exporter: Oh, that's the general agreement, among exporters, that the average of the crop was about 1%, so we guarantee it.

American Buyer: Why do you guarantee 1%? Couldn't you guarantee higher percentages just as easily?

Foreign Exporter: I suppose we could, but 1% is enough to get the business. That's what buyers in America want. We put it right on the invoice so you can show it to your trade.

American Buyer: Right on the invoice?

Foreign Exporter: Sure. But we always write a letter, too, and say the 1% is just the general estimate, that we personally don't know; but it shows on the invoice. People like it that way.

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NO SYSTEM could be more vicious than that employed by some American users of pyrethrum flowers of accepting the guarantee of exporters as to the pyrethrin content of flowers. It is a colossal fabric of guesswork that costs American insecticide manufacturers thousands of dollars annually, and will continue to do so until the present obsolete system is abandoned in favor of exact laboratory analysis of each properly sampled batch.

Assume, for a moment, that a given lot of flowers is guaranteed 1%, and when percolated by manufacturer A, 20 pounds of those flowers are used to make 1 gallon of so-called "20 lb." concentrate. Manufacturer B, on the other hand, finds that these flowers assay only .75% pyrethrins when percolated. He uses 25 lbs. of those flowers to make 1 gallon of good 20 lb. concentrate. Naturally, the concentrate of manufacturer B will be 20% stronger than that of manufacturer A. Yet both are offered with the same guarantees!

In our own laboratory in Japan last year 30% of the lots tested assayed less than .9% pyrethrins and were rejected by us. Yet it is entirely possible, under the system employed by some importers, that these very batches *which we rejected* were later sold in America with a guarantee of 1% pyrethrins.

You can readily understand how such a system was adopted in the insecticide industry. Many pyrethrum importers are, or have been, drug importers, and for years it has been common practice to import and sell crude drugs from all over the world on the basis of an exporter's guarantee of quality. The prevailing practice, suitable for many products, was extended to include pyrethrum, to which it is unsuited.

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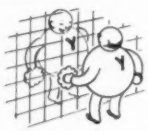
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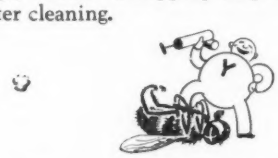
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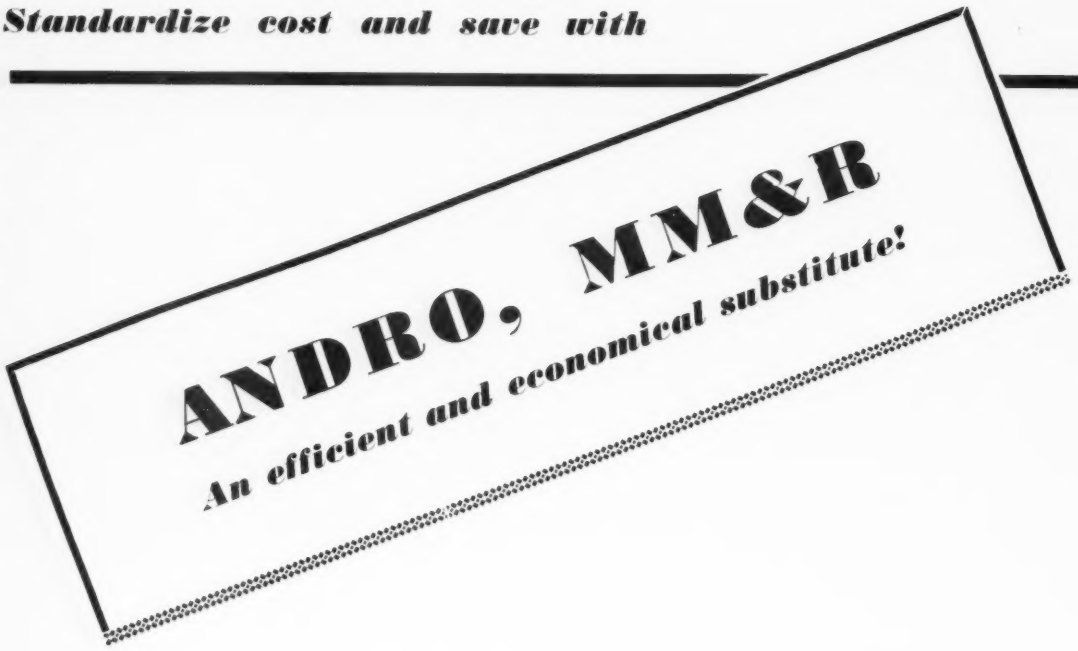
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Let Us Handle Your Disinfectant Problems!

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Let us supply you with your Coal Tar and Pine Oil disinfectants, delivered to you under your own brand-name, ready to ship to your trade—no bother, no odor, no trouble in your plant. Our extensive manufacturing facilities and years of experience in this line enable us to serve you with the highest quality disinfectants at a great saving over your present cost. It is worth your while to learn what we can do for you.

(Every lot is tested for germ-killing power, and the phenol coefficient is shown on the invoice.)

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SANITARY PRODUCTS

A Section of SOAP

Official Publication, Nat'l. Assn. of Insecticide & Disinfectant Manufacturers

The Editorial View

ON June 10 and 11 at the Edgewater Beach Hotel, Chicago, the twenty-first annual summer meeting of the National Association of Insecticide & Disinfectant Manufacturers will be held. The mid-year meeting for 1935 will be novel in several respects. First of all, the total time to be given to meeting sessions will be reduced to ten hours, five hours each day. This will leave much more time free to members for group meetings and conferences. Subjects to be discussed will be held strictly to topics of close interest to the industry at this time. There will be few speakers from outside the membership, most papers being solely by and for members of the industry. The program will be confined to legislative and commercial topics. In all, plans call for short, crisp sessions and fewer speakers. The program, as outlined, will be of deep interest and value to every member. Plan now to arrive in Chicago on Sunday, June 9!

ONCE again we have run across the tracks of one Dr. William Brady, writer of a syndicated health column which appears in daily newspapers in various parts of the country. This time he takes another fling at the use of "disinfectants" in public lavatories. We are somewhat puzzled by his use of quotation marks around the word. Possibly he does not mean disinfectants at all, but something else. At any rate, here is what he has to say recently: "The motive for the use of loud smelling "disinfectants" in lavatories is consciousnes that the facilities provided are primitive and unfit for decent people to use. . . . Unfortunately the patron is as likely as not to believe that the powerful chemical aroma somehow does protect against the risk of disease."

He then goes on to say that "plain soap and ordinary water is the only antiseptic or disinfectant, and the best one we have for such places". He also mentions that "disinfectants" are sold simply because somebody pays graft to somebody to buy them. And he tops the whole article off with the caption, "Abuses".

This kind of propaganda is distinctly harmful to legitimate manufacturers of both disinfectants or deodorants. The fact that the statements are extremely inaccurate and mostly untrue, does not mitigate the damage they do. Something should be done. But what,—by an industry whose chief concern seems to be how much it will have to cut the price to get the next order?

DURING a recent discussion on the status of the market for liquid household insecticides, a well-known insecticide man was none too complimentary of the manner in which some of the large oil companies do things in the marketing of their insect killers. Among other things, he offered his definition of an oil company, which as we remember it, was about as follows: "An oil company is usually a big outfit which would rather sell ten tank cars of gasoline at a loss than a drum of liquid insecticide at a profit.

AFTER the opposition to the Copeland Bill which has arisen from a hundred sources during the past two months, we believe that Senator Copeland, although he went to Washington from the sidewalks of New York, must be reminded of his boyhood days on a farm in Michigan,—for every farm boy at some time in his career finds out at first hand what happens when he disturbs a hornets' nest.

National Association of Insecticide *and* Disinfectant Manufacturers

OFFICERS

President ..... **Charles P. McCormick**
McCormick & Co., Baltimore.

1st Vice-President ..... **W. B. Eddy**
Rochester Germicide Co., Rochester, N. Y.

2nd Vice-President ..... **W. G. Griesemer**
Black Flag Co., Baltimore.

Secretary ..... **John H. Wright**
Zonite Products Corp., New York.

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W. J. Zick ..... **Stanco, Incorporated, New York**

MEMBERSHIP

Active — Open to manufacturers and wholesale distributors of disinfectants, germicides, deodorants, insecticides, liquid soaps, polishes, and allied products. Dues —$75.00 per year.

Associate — Open to firms supplying raw materials, containers, equipment, etc., to the membership. Dues—$50.00 per year.

For further details, communicate with

NATIONAL ASSOCIATION OF INSECTICIDE & DISINFECTANT MANUFACTURERS

John H. Wright, Secretary

CHRYSLER BUILDING **NEW YORK**

Notes of the Trade

Industrial Laboratories, sanitary products, formerly located at 2230 Boston St., Baltimore, has relocated at 17 West Conway St.

Zip Manufacturing Co., Little Rock, Ark., manufacturers of household insecticide and specialties, have opened a new branch in Oklahoma City, Okla.

Monite Company, St. Louis, moth proofing product and service, has appointed Ridgway Company, St. Louis, to direct its advertising account. Newspapers will be used.

Charles P. McCormick was re-elected president of McCormick & Co., Baltimore, at the recent annual meeting. Norman C. Settle was named a director, succeeding Harry C. Dill, and Fred W. Ensey, Walter Davis and J. G. Luttrell were elected second vice-presidents. Other officers were re-elected.

Merck & Co., Ltd., Montreal, Canada, is currently featuring "Di-Chloricide", a moth killer, in its advertising.

Sanitor Mfg. Co., formerly located at 35 E. Wacker Drive, Chicago, has moved recently to 506 S. Wabash Ave.

The Thirteen Insect Exterminating Co., formerly located at 155 N. Clark St., Chicago, has moved to 71 W. Washington St.

O. G. Greer, formerly connected with Sanitary Supply Co., Atlanta, advises us that he has sold his interest in this company and has formed a new sanitary supply company under the name of Greer-Busby Co. The latter concern is located at 67 Pryor St., S. W., Atlanta.

Executive offices of Crowley Tar Products Co. have been moved to 271 Madison Ave., New York. The new telephone number is ASh1and 4-5005.

Crane Exterminator Co., San Francisco, has moved from 419 Leavenworth St. to 530 Ellis St.

W. R. Murray, Ayrshire, Iowa, has entered into a stipulation with the Federal Trade Commission to cease representing that his rodent exterminating product has been recommended by the United States Department of Agriculture, when this is not true. Murray advertised his preparation in part as follows: "War on Rats. The National Pied Piper Rat-Killer Ready Rolled Rat Baits. A bait recommended by the U. S. Department of Agriculture—Bulletin No. 1533."



For the ninth consecutive year, the summer meeting of the National Assn. of Insecticide & Disinfectant Manufacturers will be held at the Edgewater Beach Hotel, Chicago.

Insecticide - Disinfectant Meeting June 10 and 11 at Chicago

THE commercial aspects of the household insecticide, disinfectant, and general sanitary supply situation will make up the greater part of the program for the twenty-first annual summer meeting of the National Association of Insecticide & Disinfectant Manufacturers to be held June 10 and 11 at the Edgewater Beach Hotel, Chicago. Among the subjects to be discussed will be those relating to the present uncertain state and Federal legislative situation. John Wright of the Zonite Products Corp. and chairman of the association legislative committee will present a report covering in full the entire situation, both as to new laws recently enacted and bills pending in Washington and before various state legislatures. With both manufacturers and jobbers in a number of states facing serious problems as a result of new and proposed laws, the discussion of their effect on disinfectants, germicides, insecticides, deodorants, and allied sanitary products will constitute an important part of the program.

An innovation at the summer meeting this year will be the move by President C. P. McCormick to make the sessions crisp and more interesting by limiting the time of regular meetings to five hours on each of two days. Time allotted for reports will be shortened to permit more time for discussion, while the shortened sessions will give greater opportunity for conferences and group discussion outside of the meeting.

Among the important addresses will be that of W. G. Griesemer of the Black Flag Co., Baltimore, general chairman of the insecticide committee, who will present a detailed report on the market and the present marketing situation in the field of household insecticides. Leonard Schwarcz of the Clifton Chemical Co., New York, and chairman of the sanitary products committee, will outline various problems in the market situation in sanitary specialties and suggestions for their solution. Handling and compensation of sanitary supply salesmen will be discussed by Simon S. Selig of The Selig Co. of Atlanta. W. B. Eddy of the Rochester Germicide Co., Rochester, N. Y., in reporting for the general disinfectant committee, will present a paper on "An Attack on the Law of Diminishing Returns on Disinfectant Sales."

"Pending Federal Food and Drug Legislation" will be discussed by James F. Hoge, prominent New York attorney. "The Causes and Some Common Remedies for

Athlete's Foot" will be discussed by William Hadfield of the General Laboratories, Philadelphia. An open discussion of the insecticide and disinfectant code and the status of the NRA will be led by Dr. Robert C. White of the Robert C. White Co., Philadelphia recently re-signed chairman of the code authority.

There will be a limited number of additional speakers on scientific subjects, including Dr. F. Tattersfield of the Rothamsted Experimental Station at Harpenden, England, widely known pyrethrum and derris authority, who will give an informal talk on recent development in research in derris and pyrethrum. "The Efficiency of Steam-Distilled Pine Oil as a Disinfectant" will be the subject of a paper by G. F. Hogg and B. H. Little of the Hercules Powder Co. Dr. Emil Klarmann of Lehn & Fink, Inc., will discuss the subject of B. typhosis phenol coefficients as a measure of the bactericidal value of coal-tar disinfectants. "Commercial Aspects of the Peet-Grady Test" by Dr. Alfred Weed of John Powell & Co., will be discussed as part of the report of the insecticide standards committee.

The two-day program will end with the usual informal banquet on Tuesday evening at the hotel in the form of a beef-steak dinner with a floor show of ten acts. Luncheons will be served each day at noon as in previous years. The general arrangements are in charge of John Powell of John Powell & Co., New York. H. W. Hamilton of the White Tar Co., Kearny, N. J. heads the program committee. Entertainment features of the meeting including the banquet are in charge of Grant A. Dorland of the MacNair-Dorland Co. Other members of committees handling the meeting include P. C. Magnus of Magnus, Mabee & Reynard, Inc.; Russell H. Young of the Davies Young Soap Co.; A. L. van Ameringen of van Ameringen-Haebler, Inc. Many members of the Association plant to arrive at the Edgewater Beach Hotel on Sunday morning, June 9, as numerous get-together meetings are held in advance of the regular meeting.

The tentative program as released by the committee follows:

Program

Monday, June 10th—A. M.

9:00..Registration.
10:00..Meeting called to order.
Address of the President—"Are We in Reverse Gear?"—Charles P. McCormick, McCormick & Co., Baltimore, Md.
10:30..Communications.
Roll call.
10:45..Intermission.
11:00..Report of the Secretary, John H. Wright, Zonite Products Corp., New York.
11:30..Report of the Treasurer, John Powell, John Powell & Co., Inc., New York.
11:45..Appointment of committees.
11:50..Report of Entertainment Committee, Grant Dorland, MacNair-Dorland, Inc., New York.
11:55.."What Our Membership At Large Can Do to Help Increase Our Membership," J. L. Bronn, Huntington Laboratories, Inc., Huntington, Ind.
12:00..Report of Publicity Committee, Ira MacNair, MacNair-Dorland, Inc., New York.
12:10..Remarks from the Chair.
12:30..Luncheon.

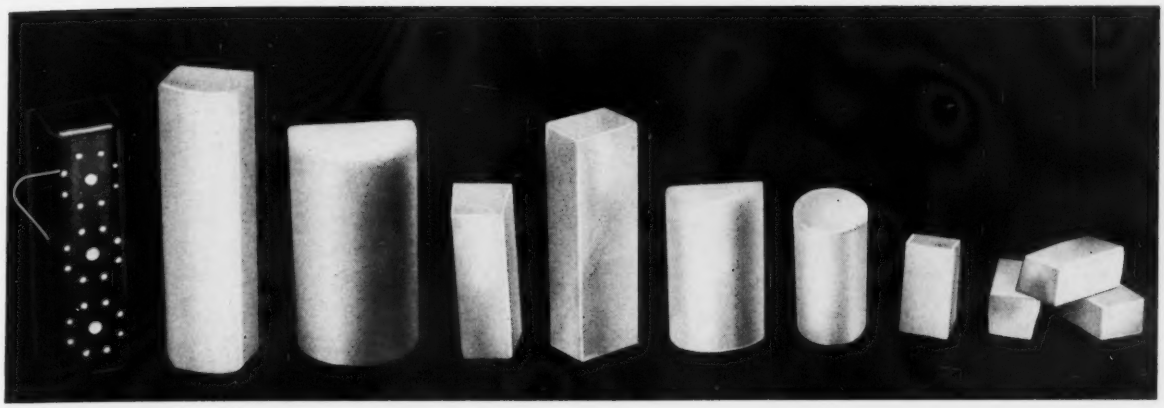
Monday, June 10th—P. M.

2:00..Photograph.
2:30..Meeting called to order.
Communications.
2:40.."Informal Talk on Recent Developments in the Field of Research on Pyrethrum and Derris" by Dr. F. Tattersfield, Rothamsted Experimental Station, Harpenden, England.
3:00.."The Causes and Some Common Remedies for 'Athlete's Foot' with Special Reference to the Products of Members of the Association" by William Hadfield, General Laboratories, Inc., Philadelphia, Pa.
3:30..Intermission.
3:45..General Open Forum on the subject of Codes, National Association of Insecticide & Disinfectant Manufacturers, and the Status of the NRA at the present time. Discussion leader: Dr. Robert C. White, Philadelphia, Pa.

(Turn to Page 119)



Beach and lakefront at the Edgewater Beach Hotel, where the Insecticide and Disinfectant Industry meets June 10.



DEODORANT BLOCKS— Are They on the Decline?

By J. FREDERICK DIENER

No, says this sales advisor for prominent manufacturers. But, at the same time, he points out the dangers of price-beating sales tactics, which may constitute a threat to the future of the modern para block.

IF it were not for the fact that there is nothing else on the market to take the place of well-perfumed paradichlorobenzene for certain deodorizing requirements, there might be something more alarming in the recurrent efforts of some thoughtless manufacturers to flood the American markets with products of marked inferiority. Certainly, at the present time, and perhaps for many years, there will be no stationary deodorant which can replace the present high quality products, unless public confidence in them is undermined by cheaply made products. It hardly requires one of encyclopedic memory to recall that back a score of years, "para" with its lurid purple perfumes was confined to the lavatories of saloons, pool rooms, and other places more or less humorously known as comfort stations. That was in the day before the makers of fine perfumes deigned to take the deodorant block seriously. In that day, had a gentlewoman encountered the vile odors of a deodorant block in the bath room of her hostess, she would have been called upon, for the sake of her reputation for esthetic taste, to flee in horror or at least to swoon gracefully. But she was spared any such embarrassing situation, for as you will remember, those deodorant blocks of the earlier variety were confined in general to public places of less elegance and in particular to places frequented by robust males. And they must have been robust!

Unfortunately there is close at hand no data touching upon the social elevation of "para" and its corresponding rise in economic importance. It is safe to say, however, that its general acceptance cannot be attributed to periodic attempts to slaughter of prices and purpose. Indeed, it must be evident that had manufacturers been generally more concerned about the quality and performance of their product, and had dealers been more discriminating in the selection of their lines, the humble deodorant block might even now enjoy a more enviable position.

It is sheer vanity to prate about quality for its own sake, but economic quality, that is, quality which can be demonstrated to be of practical utility and satisfaction, can and does support itself. Let us examine some of the recent developments of the deodorant block which have resulted in the improvement of their quality and the enlargement of their market. In order to value these improvements intelligently, we must first recount briefly the nature and purpose of paradichlorobenzene.

At a constant temperature, its crystals vaporize at a constant rate, giving off penetrating gas which is heavier than air. Its action alone helps to disperse fouled air by its expansion. In quantity sufficient to effect this dispersion, pure paradichlorobenzene vapor produces a sharp pungent sensation in the nostrils which is not entirely pleasant. One of its chief benefits then, is as a live moving filter, and another special advantage is that its vapor readily combines with other vapors and that it supports auxiliary counter perfumes. One of the diffi-

culties of perfuming paradichlorobenzene however, is that its porous surface acts much the same as a wick drawing moisture to the surface. When it is remembered that the perfumes used in deodorant blocks are liquid, it will be readily understood that the satisfaction of the finished deodorant block may depend largely upon niceties of manufacture.

In recent years, manufacturers who have recognized the importance of improvement of their product have made remarkable progress. In view of the public acceptance of these improvements, it is hardly probable that that same public could be long satisfied with inferior products that hark back to the time when deodorant blocks left that never mistaken impression of hidden filth.

But the "cut-quality" manufacturers have formidable weapons. In the sanitary supply trade, it has long been the sound practice to sell deodorant blocks by weight. Since the early blocks were all of the same approximate density, blocks of a given weight could usually be recognized by their size. More recently, however, there has been a race among progressive manufacturers to condense their blocks more solidly. Modern high-pressure machinery has been employed to reduce the porosity of paradichlorobenzene blocks. Today, a high pressure four-ounce block may appear no larger than an ordinary three-ounce block. It is natural that certain manufacturers have intentionally or unintentionally taken whatever advantage possible to foist deodorant blocks 25 per cent underweight (and often 60 per cent inefficient) upon the public. There is nothing morally wrong with selling such products for more than their comparative value, but there would appear to be something distinctly detrimental to the industry as a whole. In other words, it will jeopardize the future of the deodorant block business if the public is allowed to judge the quality and utility of deodorant blocks by the impression created by the poorest examples.

Much depends upon the attitude of dealers toward inferior products. It is probable that far-sighted dealers will resist attempts to flood their trading areas with the low quality products. While it is not generally within the dealer's province to crusade for quality, the peculiar set-up of most sanitary supply dealers makes it unsafe to follow the simple course of giving the public what it asks for at any price they choose to pay. Among most sanitary supply dealers, the majority are known to their customers as manufacturers and in that role they carry all or nearly all of their goods under their own label. Since they thereby shoulder the responsibility for the satisfaction of their merchandise, it may be reasonably expected that they do and will continue to throw the weight of their influence on the side of quality.

UNFORTUNATELY, many dealers in sanitary products do not themselves appreciate the real merchandising difference between well made and poorly made deodorant blocks. And indeed this is not surprising, for the real difference depends too much on an intangible factor,—the impression upon the public. It is not a question of how hard, or how tough or how heavy the blocks may be. It is not a question of how strong the perfumes may be when the blocks are made. The satisfaction, and therefore the value of a deodorant, depends upon whether its use creates an impression of cleanliness or of secret dirt, and further, how long it can maintain the impression. Some manufacturers have recognized the importance of the elusive impression and have set about correcting their product to fulfill the public expectation. At least a few of the leading manufacturers have been able to make considerable progress in this respect.

One of the first steps to be made was to control the rate of dispersion of the perfumes. In order to accomplish this, it was necessary to produce a deodorant block less porous. The simple hand stamping method which produced very porous and fragile blocks, soon gave way to high power die stamping machines which dry-moulded the blocks under pressures up to eighty tons. While the blocks produced in this way are obviously stronger, the real advantage lay in the fact that their perfumes could be made to last longer and volatilize evenly for the life of the block. With this new type block, dyes and perfumes are not dissipated during the early exposure, but are retained until the block itself disappears.

Another improvement followed in natural progression. With the development of high-pressure deodorant blocks, it became more practical to pay attention to the perfumes used in their making. The cheap perfumes began to be replaced by those of more subtle fragrance, and it was found that they created more satisfactory impressions. From good authority comes the word that now one of the largest perfumers in the world conducts continual experiments in an effort to develop the most suitable perfumes for use with paradichlorobenzene. These newer perfumes naturally are more costly than those adopted from other commercial uses. Certain of the most progressive manufacturers of deodorant blocks are now incorporating into the making of their blocks, perfumes which compare favorably with those used in the finest domestic trade. The development of perfuming in deodorant blocks has been interesting and perhaps more than any other one thing is responsible for the growth of this business during the leanest years of our history. Certainly it has helped to spread the use of deodorant blocks in homes and well appointed lavatories.

Another improvement in the efficiency of the deodorant block was made in the packaging. Since deodorant blocks were often stored for many months before use, it was found that they lost considerable weight due to volatilization. Nearly all manufacturers recognized the value of cellophane in combating atmospheric disintegration and the trade was quick to appreciate and adopt this improvement.

In spite of the public's ready acceptance of an improved product, there are recurrent efforts on the part of

(*Turn to Page* 117)



How to Select and Judge a Water Emulsion

FLOOR WAX

By RICHARDS JARDEN

President, Franklin Research Company

TO THE layman, water emulsion wax is something new with very little background, and an item that has been promoted in a rather haphazard way by many manufacturers and merchants who themselves fail to recognize that the material does have a background of acceptance in several industries. They also do not seem to realize that there is a great deal of very definite information in the hands of these industries as to how such a product should be made, what can be expected of it, and its limitations.

This apparent misunderstanding that reaches from the manufacturer to the user in many instances has resulted in a great deal of confusion where in reality there should be none. If one would approach this water emulsion situation on the basis of good, solid "horse sense" rather than to place his thoughts alone on the singular, spectacular feature,—"self-polishing,"—there is no question but that a selection from the field of good, bad, or indifferent water emulsion waxes can be accomplished to the very great advantage of the user.

Just as soon as we get behind us this thought that the "self-polishing" feature is of paramount importance and understand that in reality it is but one of the many necessary requirements that must be considered in our selection of a well-balanced water emulsion wax, we find ourselves able to approach the situation from the standpoint of true economy and thus uncover these more important features:

1. Guarantee against damage to the floor covering.
2. Wearing quality,—ability to stay cleaner and wear better under traffic.
3. Balance of water resistance.
4. Coverage per gallon.
5. Self-polishing feature.
6. Ease of application.

The writer believes the above characteristics of a good water emulsion wax are mentioned in line with their importance, and it is pointed out that "self-polishing" is very close to the end of the list. Surely there must be something more to a good water emulsion



Imperial Sanitator

THE SPRAYIT
New Imperial
SANITATORS

Still Low in Price — Many New Improvements

An Entirely New Atomizing Principle

Adjustable Extension Nozzle

Variable Volume Control

New Automatic Time Switch

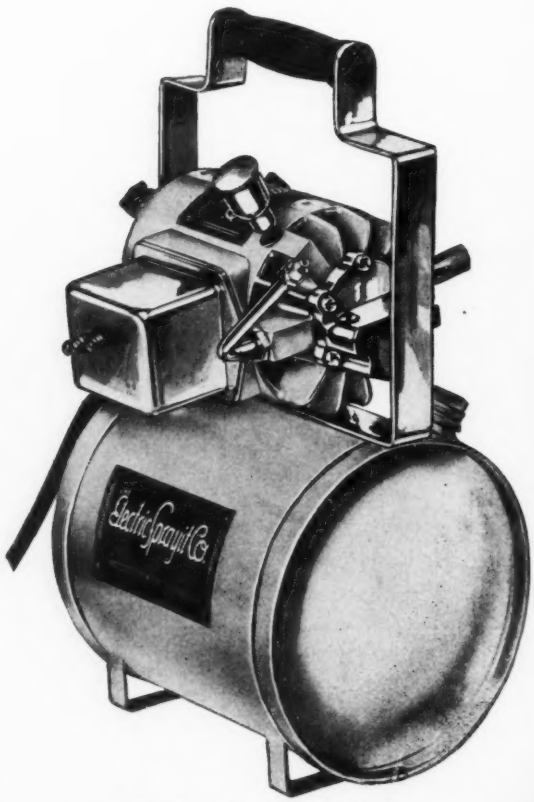
THE SPRAYIT IMPERIAL SANITATOR is furnished in standard models either with or without Time Switch; ⅛ H.P. 110 Volt Universal Motor that operates on AC or DC Current; 26 oz. glass insecticide jar; 8 feet of oil resisting rubber covered cord; shipping weight 12 lbs. Time switch is adjustable from 1 to 45 minutes. ALL MODELS ARE FURNISHED WITH ADJUSTABLE EXTENSION NOZZLE, AND VARIABLE VOLUME CONTROL. There is a slight extra charge for voltages other than 110 Volts.

These units are suitable for use in areas up to 100,000 cubic feet in restaurants, food stores, hotels, apartments, hospitals, schools, institutions, theaters, office buildings, mills, warehouses, etc.

THE SPRAYIT
Imperial Deluxe
SANITATOR

THE SPRAYIT IMPERIAL DELUXE SANITATOR represents the very last word in spraying equipment of this type. It is a beautiful piece of machinery, a precision instrument from every angle, incorporating every advancement desired by the insecticide industry.

THE SPRAYIT IMPERIAL DELUXE SANITATOR incorporates all the excellent new features of the IMPERIAL SANITATOR with a greatly increased capacity and beautiful finishing. In addition to this, the large filler cap enables the operator to refill the unit without removing the container, thereby saving a great deal of time and energy. THE IMPERIAL DELUXE SANITATOR is furnished complete with extension nozzle, variable volume control, Time Switch, 3-quart plated brass container with extra large filler cap, all highly polished and plated.



Imperial Deluxe Sanitator

THE ELECTRIC SPRAYIT COMPANY
220 N. BROADWAY MILWAUKEE, WIS.

wax than this ability to dry to a luster without buffing, or the product could not so definitely have taken the leading place in the field of floor maintenance materials in such a short period of time. When one examines the flap of an ordinary envelope and notices the bright gleaming surface of the glue on that flap, he can readily understand that the self-polishing feature is in itself of no great importance and that there must be many, many products that could be applied to his floor to produce the same results.

Let us consider these really important features as mentioned above and by taking each point separately for consideration, undertake to work out a method by which anyone can make an intelligent selection between a number of different brands of this product.

1. Guarantee of No Damage to Floor Covering

The different manufacturers of floor coverings have gone to great trouble and expense to make this selection for the user, and there is published what is known as an "approved list" of waxes and this information is available from the manufacturer of any type of floor covering. It must be understood that these manufacturers of floor coverings do not undertake to classify the different approved items as to their respective qualities. The approvals merely assure the buyer that the item in question is safe for use on the particular type of floor covering, and it is still the buyer's job to make a selection within that approved list to arrive at that material which is economically correct as well as safe for his use.

2. Wearing Quality

Ability to stay cleaner and wear better under traffic, in a wax means but one thing: a balance in the toughness of the film between the point of a too hard wax and a too soft wax, so that the film as laid on the floor is hard enough to withstand wear and eliminate the slippery effect of the soft, mushy type product, while at the same time being soft enough to retain its wax-like characteristics and lend itself to easy maintenance.

It is not enough to know that the bulk of the solid content is carnauba wax, for in the making of the product this carnauba wax is combined with different types of emulsifying agents, and this combination of emulsifying agents and carnauba wax represents the total solid content as it appears on the floor in a film. It can readily be seen that those emulsifying agents can so definitely change the characteristics of the carnauba wax that the original hard dry characteristic of the raw wax can be varied to a point that it becomes soft and mushy by the institution of too much soap or oil in the formula and can go to the other extreme and become so hard, brittle, and shellac-like through the institution of too much resins. There must be a balance between the two extremes of softness and hardness if one is to expect real economy in wearing quality under traffic and an ability to stay clean on the floor.

The test to determine this balance of film can be made by placing 50 drops of any two or more waxes in shallow tin or glass containers and allowing 24 hours for the evaporation of the water, at which time the actual solid residue will show as an exaggerated film in the bottom of these pans and allow for a close physical examination of this exaggerated film.

3. Balance of Water Resistance

It must be borne in mind that wax is a maintenance item, not a permanent coating for any surface, and that unless one is willing to give this wax film reasonable care and periodically wash off the old film and make a new application, he might better do without wax and go back to the old soap and water method or apply a so-called permanent coating such as varnish, shellac or lacquer.

Being a maintenance item, the film as laid on the surface must adapt itself to ordinary maintenance methods, and invariably this includes an occasional damp-mopping of the surface, followed by a subsequent dry cleaning with a brush, broom, or machine. Again, the surface is constantly subjected to abuse from water that is carried into the building on rainy days, or splashed on the surface in the vicinity of the water coolers.

We see here that wax must be built to withstand water, otherwise it would show white spots from the dripping of water, and it would wash completely off the surface or definitely break down during the damp-mopping periods. However, one can go to the other extreme even on this subject of water resistance, and produce a wax that is so high in its water resistant qualities that it is lacquer-like, and for that reason presents a very difficult, if not an impossible job of removing at that period when the old wax should all be removed in the preparation for re-waxing.

The usual procedure is to apply wax at weekly or semi-monthly intervals over a period of five or six months to any given area, and it will be noted that as the subsequent coats are applied there is a gradual build-up in the thickness of the film in those areas where the traffic is light and there is but little wear taking place. One would find a gradual darkening of the surface as these different thicknesses of wax build up, one on top of the other, for as the film becomes thicker, it takes on the original color of the carnauba wax and loses that transparency which is only present in the very thin film. Right here is where the trouble starts with that water wax that is too high in its water resistance.

The longer the average water emulsion wax remains on the floor the more resistant it becomes to water, for it is constantly throwing off part of the emulsifying agents. Therefore, if the wax is too highly water resistant to begin with, it can be seen that as the real cleaning of the surface will only take place at six, eight, or twelve month intervals, that these built-up films of old wax will have become very highly resistant to water, in fact so highly resistant that they cannot be removed with ordinary cleaning methods or cleaning materials, and they present the same problem of removal as is presented by a lacquer or a varnish.



THIS NEW UPRIGHT JOHNSON & JOHNSON CONTAINER, repackaged by Continental, takes less shelf space and fits comfortably in any home cabinet. Standing erect, it has far superior display value. An easy slide lid has replaced the hinge.



THIS BEAUTIFULLY LITHOGRAPHED DRUM conveys an impression of the quality that does justice to the fine Procter & Gamble shortening which it contains. It is indicative of the wide scope of Continental's ability to supply tin containers of all sizes and shapes.

Below: SIMPLICITY AND HIGH VISIBILITY mark the new design. The brand name is now given proper emphasis and the new can has a broader display surface. The lock-top has the improved rolled edge—more consumer convenience.

First Aid

TO AILING CONTAINERS

For thirty years Continental's development department has enjoyed singular success in modernizing containers, giving them sales appeal, and suiting them to the product, its use and distribution. An analysis of your present package—suggestions for its improvement in design and character—will gladly be made. Simply write, wire or phone the nearest Continental sales office.



THE ORIGINAL DEVOE CONTAINERS were ill-mated and lacking in sales appeal. Now the bottle has been replaced by an attractively lithographed tin container with broad display surface. The new Clean-All package has been given greater consumer convenience, and the added protection of Continental's Tripletite feature. Sales of Clean-All jumped 800%. Renulac did even better.

"IT'S BETTER PACKED IN TIN"

CONTINENTAL CAN COMPANY

NEW YORK CHICAGO SAN FRANCISCO

The correctly balanced water emulsion wax is so constructed chemically as to withstand the accidental dropping of water on the surface, and from the usual damp mopping method of floor maintenance, while at the same time, not so highly resistant to water that it presents a difficult problem for removal at the periodical thorough cleaning.

The test to determine a well balanced water resistance can be made by applying smears of two or more waxes on a piece of floor covering, preferably black rubber, allowing same to dry and then damp mopping with the moistened end of one's finger at intervals of two, six, twelve, and twenty-four hours. While the test smear is still wet from the damp finger, wipe this moisture from the piece with the dry heel of your hand and notice the damage done to the film.

4. Coverage Per Gallon

Coverage varies but little with the many different water emulsion waxes on the market. It is a fact that the best of these formulas show a solid content running between 12% and 16%, consequently, the total amount of liquid (water) is between 84% and 88%. As the specific gravity of water is similar throughout the world, it is natural to assume that the coverage per gallon of water at one manufacturing point is similar to the coverage per gallon of water at another manufacturing point. Therefore, one can assume that the coverage per gallon is similar in those waxes which have a somewhat similar solid content.

This point of solid content is important for any of the approved waxes as mentioned by the different manufacturers of floor coverings or the United States Dept of Standards, most carry at least a 12% solid content. It is a fact that certain brands are on the market with an extremely low solid content containing one-third or one-quarter the amount of solids as carried by those approved items. It is utterly impossible for one to look at the material in liquid form and judge as to the amount of solid content.

The amount of coverage per gallon on a low solid content and a correct solid content wax would be quite similar except that the thickness of the film laid by one would be two, three, or four times greater than the thickness of the film laid by the other, and naturally this thickness of film has a bearing on the wearing quality. So again, it is advised that purchases be selected from actual approved items, thus assuring the bearer that a chemical test has been made by an impartial person and a solid content of at least 12% is assured.

5. Self-Polishing Feature

This spectacular feature is to a certain extent overstressed by both the buyer and the seller, for it is a fact that the difference between the luster of one fairly good wax and another fairly good wax is but slight. It is also a fact that this slight difference in luster could only be noticed during the first 24 to 48 hours on the floor, because during that time there is a constant movement of traffic over the surface, and this friction by traffic and the usual nightly sweeping with broom or brush would have a great tendency to equalize the luster within 48 hours after application.

Naturally, the ability of a water emulsion wax to dry to a nice luster is a definite feature in its favor for this does eliminate a great quantity of general maintenance work while the material is on the floor, so this point cannot be overlooked.

The test to determine the luster accomplished without buffing can be made by again applying smears of two or more waxes to a piece of black rubber and while examining the dried film for luster, it is important that one eliminates that film which shows a hazy appearance, for this would indicate a tendency to gradually build up an unsightly non-transparent film on the surface and to a great extent hide the original color and pattern of the floor.

6. Ease of Application

Ease of application is an important point to consider, due to the fact that certain formulas develop surface tension, so that the wax fails to cling to the surface properly and pulls up into ridges, with the result that there is more wax deposited in one spot than in another and this of course results in a decidedly uneven luster.

The more wax of any formula deposited at any one spot, the higher should be the luster in that particular spot. Consequently, two coats will be more lustrous than one coat, or one thick coat more lustrous than one thin coat, and unless there is ease of application and absolute freedom from surface tension, it is impossible to get an even and satisfactory appearance.

Again, from the standpoint of ease of application, we find certain products very high in their soap content, with a great tendency to "suds" on the floor. However, one can to a great extent govern this by the method of application, so that in justice to any particular formula, the buyer should give due thought to the study of application methods before condemning a product on this basis.

It is seen here that there is a very definite rule to follow in the manufacture or the buying of a water emulsion wax if one expects to make or buy a product that will really be correct. It will be found that one wax will be short in one point while another is short in some other respect, but it will also be found that there is definitely a possibility of buying a wax that is well-balanced in all of the above mentioned features and it goes without saying that such a product is going to give the buyer economy that cannot be even hoped for in the unbalanced product.

In conclusion it can be pointed out here that unless one has had experience with a water emulsion wax which does test out correctly on the above mentioned paramount points of merit, that he is not in a position to form an opinion as to the general economy that can be secured by the use of a correctly made emulsion wax.

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It's the odor that sells the Product

DERRIS

To What Does the Root Owe Its Insecticidal Properties?

By Dr. R. S. CAHN, A.I.C.
Cooper Technical Bureau, London

THE last few months have seen the development of a new phase in the appreciation of derris. So much, both correct and incorrect has been written about the composition of derris, so many claims, both valid and wildly exaggerated, have been made for its powers as an insecticide that refusal to do more than glimpse at yet another article on the subject may possibly be forgiven to the reader who is not bound to a specialized study of this complicated material. However, this article is an attempt to give a summary of the present position suitable not only for the specialist, but also for the ordinary commercial user.

The use of derris root as a fish-poison was first described in European literature in 1747, and its use as an insecticide has certainly been practiced on a modest scale by native gardeners in Malay, Sumatra and the neighboring islands for a very long time. The first patents relating to it were taken out in 1911 in Great Britain, but it is only within the last ten years or so that the value of derris has been at all generally recognized. It was early found that derris, like most naturally occurring materials, is a widely variable product and this, of course, caused the authorities in America and elsewhere to seek some means of assessing the value of the root. However, the non-poisonous character of derris led to an abnormally rapid expansion of its use, and this was fostered by much official encouragement. The use of derris by agriculturalists outran the knowledge of its chemical constituents, and it is hardly a cause of wonder that the earlier methods of evaluation, based, as they were, on incomplete chemical data, have now to be revised in the light of later work.

Rotenone, a definite chemical substance, was isolated as early as 1902. During 1929-1932 the chemical structure of rotenone was elucidated by the joint labors of La Forge (America), Takei (Japan), Butenandt (Germany), and Robertson (England), who competed for and share the credit of solving in a comparatively short time a chemical problem that presented many unique problems of very considerable difficulty. It was soon recognized that pure rotenone possesses the insecticidal properties of derris to a very marked degree, and consequently it was a short step to connect the activity of derris with its content of rotenone. Various factors assisted in making this connection. In the first place, rotenone was the only pure active constituent of derris which could be estimated. Secondly, Clark soon isolated three more substances from derris by the action of fairly strong, hot alkali. These three substances, deguelin, toxicarol, and tephrosin, were shown by Davidson and by Shepard and Campbell to have considerably less insecticidal power than rotenone. Consequently, it was frequently,—though not invariably,—assumed that the constituents of derris other than rotenone made little contribution to the insecticidal efficiency of the root. Thirdly, Jones published a fairly accurate method of determining rotenone. The original ether method of Roark was shown to be unreliable, particularly for roots which were relatively poor in rotenone. Jones' method, in which carbon tetrachloride is used, was a great improvement in this respect, and, moreover, gave readily reproducible results. There thus grew up a habit on the part of the agricultural authorities of paying attention solely to rotenone content, of specifying the rotenone content of the dusts used and of advising growers to demand certain rotenone contents in the products purchased by them. Very little, if any attention, was paid to the "resin" (or ether-extract) content of the products, as this was considered to be immaterial.

Actually this conclusion was a false one. When Clark first described his three new substances (1932), he twice expressed perfectly clear and grave doubts as to whether these substances actually existed in the root. He wrote that it was not merely possible, but indeed probable, that they did not exist as such in the root, but that they were formed from precursors of unknown type by the action of the hot alkali used in the experiments.

In the intervening years evidence has been gradually accumulating. In the first place, various workers have demonstrated that derris which contains no rotenone may have high insecticidal powers. There are published data to this effect by Campbell and his co-workers as regards house-flies and by Götze as regards the warble-fly larvae. Jones and his collaborators working on mosquito larvae showed that insecticidal efficiency was not proportional to rotenone content. Further evidence is given by published work on fish. Now, data obtained by means of fish can only be applied with great caution to insects. Nevertheless, when three groups of workers (Takei and his collaborators in Japan, Danneel in Germany, and Haller and La Forge in America) all agree that derris resin, freed so far as is possible from rotenone, still possesses powerful action on fish, the agreement with the work on insects is striking. It is quite clear that derris must contain insecticidal principles other than rotenone.

In the last few months chemical work has strikingly

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Automatic Time Switch—Volume Air Control On Gallon Capacity 1-3 H.P. G. E. Universal Motor

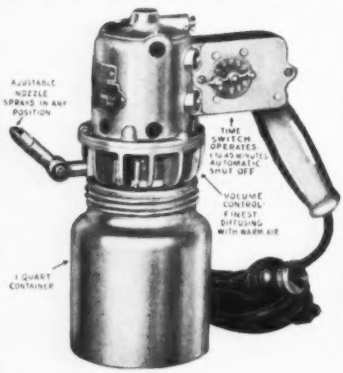


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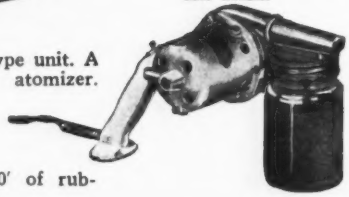
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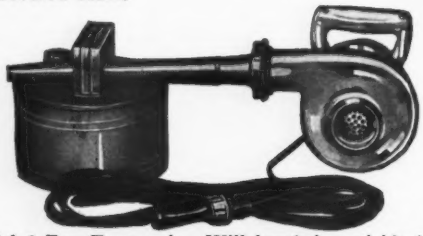


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It features an automatic time switch set at any point from 1 to 45 minutes—sprays desired amount without any attention whatever — automatically shuts off. Can also be used for hand spraying. Adjustable nozzle can be set for spraying in any position. Also exclusive volume control adjustment permits spraying one ounce every two to four minutes with either fine or heavy spray. MODEL 53 same as Model 54 except does not have automatic time switch or adjustable nozzle.



Model 50 Fan Type unit. A fine insecticide atomizer. Sprays distance of 8′ to 10′. 1/8 H.P. G.E. Universal Motor, 1 pint glass jar. 20′ of rubber covered cable.



Model 6 Fan Type unit. Will break insecticide into a very fine mist. Sprays 18′ to 20′. 1/3 H.P. G.E. Universal Motor. Norma Ball Bearings, 1 gallon metal container. This model is for larger institutions, warehouses, industrials, etc., and is also highly recommended for moth-proofing solutions. Write today for complete description and circulars.

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justified Clark's doubts. It was shown by Takei about a year ago that derris contains only little tephrosin. Very recently, Haller and La Forge provided very good reason for believing that at most a small amount of the deguelin existed in derris as ordinary deguelin. Finally, Cahn and Boam have just produced convincing evidence that the same applies to toxicarol. All three substances, therefore, do not exist as such in derris. The fact that they are only slightly insecticidal is quite immaterial.

Finally, in another paper, Cahn and Boam show that even Jones' method of determining rotenone has its faults. This method too gives low results for derris poor in rotenone. In fact, a derris root may contain up to about 3.4% of rotenone and yet show none at all by Jones' method of analysis.

THE present position then is that derris appears to owe its insecticidal properties partly to rotenone and partly to the other uncrystallizable constituents which are usually called "resinous material", "ether extractive", or some such term. Practically nothing is known about the chemistry of this "resinous material". No pure substance has been isolated from it, except a substance, melting at 189°, which was obtained by Cahn and Boam from a certain type of root; the quantity of this substance isolated was about ½% of the total "resinous material" and its contribution to the insecticidal power of the root is thus probably negligible. We have a further possibility (Haller and La Forge) that the root may contain laevoratotory deguelin (which is not the same as Clark's deguelin), but this remains still only a possibility.

It is easy to foresee that the result of this changed position will be a renewed attack on the chemistry of derris. A determined attempt is certain to be made to ascertain what actual substances are present in the root. If these attempts succeed, it will be possible to lay down sound scientific standards for derris and products containing it. Until that time arrives, the position is bound to be somewhat unsatisfactory. The U. S. Department of Agriculture has laid down that both the rotenone and the "resinous material" may be justly claimed as "active ingredients", but there is no published work enabling us to judge the relative value of these two active materials.

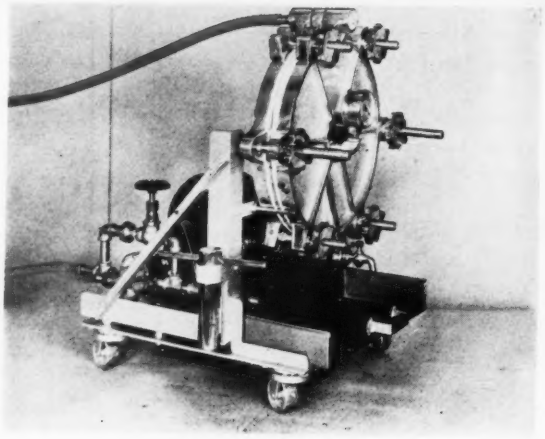
This must be a matter of grave concern to the manufacturer of derris products who purchases his root. Such manufacturers have no sound published information upon which to base their formulae. The present position gives a very definite advantage to those manufacturers who have carried out their own biological work and have evolved their own standards.

The position has certain points in common with that in regard to natural products used in medicine, but there are also very significant differences. Let us take two typical cases, opium from which morphine is obtained, and cinchona bark from which quinine is obtained. The use of crude opium in medicine is very small, the use of pure morphine very large. The reason is, of course, that the other alkaloids have a physiological action strikingly different to that of morphine and induce certain undesirable effects. To obtain the full benefit of morphine, it is essential that it should be pure. On the other hand, quinine and the other alkaloids present in cinchona bark have a fairly similar effect against malaria. The activity of the different alkaloids present is not quantitatively the same, but all are to some extent effective, and the activity of the total alkaloids is greater than that due to the quinine content alone. Consequently, the "total alkaloids" can be used for treatment of malaria, and indeed are so used where cheapness is an important matter. Pure quinine is generally used when no account need be taken of a slight extra cost, but the chief reason is the desire to be able to gauge the dose with complete certainty, in fact to avoid an overdose. Now derris resembles cinchona rather than opium. Rotenone and the "resinous" constituents of derris have the same sort of effect, that is, they all kill the insects. The reason for preferring quinine to the "total cinchina alkaloids" does not arise with derris. There is no vital necessity to avoid an overdose of derris! Actually an overdose of derris is always given. The amount of poison in an insecticide is always an excess. No manufacturer cuts down the derris content to the lowest possible amount sufficient to kill the insect, for he must insure that his insecticide will be efficient if the method of application is not absolutely the best possible, or if the weather is not the best possible, or if the insects in the district in question are somewhat more resistant than those in the district where he carried out his trials. This "margin of safety" is far greater, with the products of reputable firms, than is perhaps generally recognized. Actually, it is far greater than the relatively slight variations in insecticidal power caused by varying the rotenone content *alone* of any particular brand of product.

THE position is, then, not nearly so grave for the user of derris products as it might at first sight appear. Moreover, the composition of the derris used is only one of many factors affecting the efficiency of the article. Other equally important factors are (1) the time when the material is used (the period in the life-history of the pest), (2) the weather at the time of application, (3) the degree of fineness of the root-powder, (4) the nature (fineness, heaviness, etc.) of the "diluent" or "inert material". Factors (1) and (2) are controlled by the user himself, guided (if he is wise) by advice from the manufacturer or local agricultural station. It is, however, strange that the importance of the last two factors is so little realized. It is really self-evident that the degree of "cover" obtained, that is the area protected by a given weight of derris, is largely governed by the fineness to which the derris is ground. Obviously, a given weight of derris divided into ten pieces will protect a smaller area than the same weight divided

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Here is the ideal inexpensive mixer for polishes, disinfectants, cleaning and washing fluids, etc. Also useful in incorporating perfumes and colors in your liquid products. A machine with no end of uses in any plant. Assures a perfect mix. Made in various sizes for every factory—large and small.

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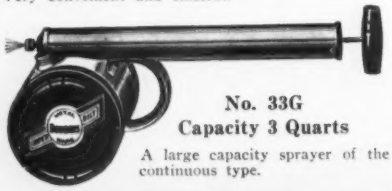
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The discharge has a wide range of adjustments, from a forceful, penetrating spray, to fine floating fog, with in-between variations.



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Pressure sprayer with lever control can be operated as continuous sprayer by holding lever down while pumping. Very convenient and efficient.



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A large capacity sprayer of the continuous type.

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Spray one cow with a small hand sprayer. You will find it a tiresome job. So will the dairymen. Too often they give up before enough spray is applied—to insure protection.

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They Will Outlast Three or More Tin Sprayers

Let us help you with your spray problems. Write for Catalog No. 43.

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into a hundred pieces. Now it is not a very easy matter to grind derris root *really* well. However, when properly ground, the particles are so small as to defy ready measurement and it is probably for this reason that so little attention has been paid to the size of division when laying down specifications for derris products. Fourthly, the "diluent" will obviously play a large part for it may help the derris to adhere to the surface to be protected, or it may act in the reverse direction. Again, it may give a light cloud suitable for tall trees or a heavy one suitable for root crops. Yet in this matter, the user is in the hands of the manufacturer of the dust. The number of substances which can be satisfactorily used for the various types of dusts is so large that it would be impossible to specify them without unduly restricting the opportunities of an enterprising industry.

The user of derris is thus in a difficult position. He cannot specify the composition of the derris which he wishes, because there is at present no sound evidence on which to base such a specification. Equally he is not in a position to specify the fineness of division to which the root must be ground, or the inert material with which it must be mixed. In all cases he is largely in the hands of his supplier. Under these circumstances, it seems that his only safe course is to buy his supplies from well-known firms, that is, from firms who have reputations to lose and who, in consequence, carry out their own research to overcome the variation in efficiency of derris root (either by biological tests or other means) and to provide root properly ground and mixed with the inert material best suited to the purpose specified.

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The method of Gnadinger and Corl for the determination of pyrethrins by the measurement of reducing power has been adapted to the analysis of rotenone solutions. Such solutions must contain no other reducing substances. A standard solution of dextrose and an alkaline solution of rotenone are treated identically in a modified Folin determination for sugar. The precision is about 2 parts per 1000. The method gives high results for the rotenone content in derris root but it may be possible to find an arbitrary relationship between the reducing power of derris root and its killing power. Roland M. Whittaker and Irving Glickman. *Rec. trav. chim.* **53,** 1145-50.

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Analyses have been made of a number of samples of the roots and young stems of *Derris elliptica* and *Derris malaccensis*. Both these varieties of derris are cultivated in the Belgian Congo. If the yield of rotenone is considered alone, preference is given to *Derris elliptica*, but *Derris malaccensis* is to be preferred if a large yield of toxic substances is desired. Anon. *Bull. agr. Congo Belge* **25,** 442-4.

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Ore & Chemical Corp., New York, importers of thallium sulfate, have moved their offices to 80 Broad St. The new telephone number is BOwling Green 9-5523.

PROPOSE NEW PYRETHRIN METHOD

A proposed new method for the determination of pyrethrin II was presented by H. L. Haller and Fred Acree, Jr., in a paper prepared for the recent New York meeting of the American Chemical Society. The proposed method is based on the fact that pyrethrin II is the pyrethrolone ester of chrysanthemum dicarboxylic acid methyl ester and therefore, when boiled with hydriodic acid, yields methyl iodide. The latter is determined by the volumetric method of Viebock and Schwappach as modified by Clark. Another paper presented by E. W. Bosquet, H. F. Dietz and P. L. Salzberg discussed new type argicultural insecticides obtainable from vegetable oils. It was reported that the higher alkyl rhodanates are highly effective as contact insecticides, lauryl rhodanate being the most effective compound investigated.

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DETERIORATION OF PYRETHRUM

The loss of the insecticidal activity of pyrethrum was at one time erroneously regarded as due to the volatility of the active principles. The loss takes place, however, in closed vessels, and is rapid when dusts or finely powdered flowers are exposed in thin layers in air or oxygen to sunlight, ultraviolet, or even bright artificial light. It occurs much more slowly in the dark. The action is a surface one, and is much slower in inert gases such as nitrogen or carbon dioxide than in oxygen. It can be partially inhibited by such antioxidants as hydroquinone ar tannic acid. The change is therefore evidently due to oxidation and is strongly activated by light.

Whole flower heads lose their activity much more slowly than ground flowers, and the latter more slowly than extracts dispersed on absorbent earths. In addition to the above rapid loss of activity, there is a slow decline in potency on storage which is due to some other cause than that of oxidation by free oxygen. It has not yet been ascertained to what extent, if any, the moisture content of the flowers may be responsible for these slow losses. Heat is also destructive of activity. It is obvious that good storage of flowers is requisite. They should be shielded from strong sunlight and kept in a cool place.

Pyrethrum powders are considered by Ripert (Bull. Ann. Falsifications No. 271) to retain their activity better than is usually supposed. Extracts dissolved in kerosene and other inert solvents are relatively stable when stored in good containers and shielded from light. The presence of strong alkalis and soaps may have a deleterious action by hydrolyzing the esters. F. Tattersfield. *Chem. Trade J.* **96,** 251-2 (1935).

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Like the pyrethrins, rotenone loses its activity when exposed to sunlight and air. Dihydro-rotenone, a compound of the same order of toxicity as rotenone but more stable, has been suggested for use. F. Tattersfield. *Chem. Trade J.* **96,** 273-4 (1935).

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Lehn & Fink Products Co. has named J. G. Belknap a director of the company.

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COAL-TAR CHEMICALS

CRESOL U. S. P.

Always uniform in distillation range and composition, you can be sure of the uniform solubility of your Cresol Compound when using Barrett Standard Cresol U. S. P. Also, the Cresol Compound will always contain less than 5% Phenol, thereby falling well within the limitations of the Federal Caustic Poisons Act.

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Carefully blended oils ranging in tar acid content from 10% to 75% for manufacture of animal dips and disinfectants.

CRESYLIC ACIDS

Ninety-nine per cent and 95% grades of various distillation ranges depending upon requirements.

PHENOL U. S. P.

Pure white crystalline products, 39.5° C. and 40° C. minimum melting points.

HYDROCARBON OIL

A neutral coal-tar oil for high coefficient disinfectants.

SOLVENT NAPHTHA

Approximately 25° C. boiling range.

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SPRAYSENE

The Scientific Insecticide Base

Free from Kerosene Odor

Para in Moth Control

THE habits of clothes moths and their control by various chemical means, especially the use of paradichlorbenzene, are discussed in an article in the last issue of *Monsanto Current Events* by J. A. Berninghaus, general sales manager of the Monsanto Chemical Co., St. Louis. His article stated in part:

"These insects were well established as household pests in Biblical times and were in ill repute with the Romans and other ancient people. They have accompanied man on his travels and migrations. Moths are not indigenous to America but were brought here by Europeans and doubtless were uninvited passengers on the Mayflower.

"Today we are in the odd position of giving moths the toughest battle they have ever had in their long contest with man while at the same time offering them an ideal environment in which to propagate and forage. Our comfortably heated houses and apartment buildings are much to their liking and permit them to breed and conduct their perforating rampages all the year round. Never before have they had such an elaborate menu, ranging from clothes and upholstered furniture to felt pads of piano keys. Left to their own devices, moths could not travel far, but we aid them by transporting infested materials. We also build our dwellings close together, making long journeys unnecessary for them.

"These apparent advantages, however, are offset by the fact that our knowledge of moths and their modes of living combined with the application of chemical knowledge provides us with powerful lethal weapons to use against them. With such equipment, there is no excuse for our permitting moths to do damage estimated variously between $100,000,000 and $200,000,000 each year in this country.

"In combatting moths, there are several simple precautions which housewives can take as routine measures. Fortunately, the eggs of moths are fragile and the larvae cannot assimilate much physical punishment. Thorough beating, brushing, and sunning of clothes and furnishings twice monthly will as a rule keep materials free from injury. Garments worn several times monthly are not apt to be attacked. Eggs and larvae are removed when clothing is washed in a strong soap solution. They are killed by immersion for ten minutes in water at 140°F. Dry cleaning accomplishes the same end.

"But the major damage is done by moths when clothes are put away for seasonal or other reasons. It should be remembered that moths in their various stages of development are present in modern homes all year round. For real insurance against damage, we must look to chemicals. One of the most effective of these in the killing of moths and in moth damage prevention is paradichlorbenzene. It is a white crystalline chemical and is widely used in its pure form or as the main constituent of moth killers. The vapor of paradichlorbenzene is nonpoisonous to man but deadly to moths. Its odor is not disagreeable and quickly disappears from clothes when exposed to outdoor air.

"Clothes and other materials subject to moth attack can be easily protected by a judicious sprinkling of paradichlorbenzene and then thoroughly wrapped in paper or placed in well sealed paper bags. Moths will not eat through paper and the vapors given off by the paradichlorbenzene assure death to any moths or larvae that may already be in the clothes. There is nothing to the old idea that the ink in newspapers repels moths.

"The use of paradichlorbenzene is effective in tight chests, drawers, trunks, and closets where the vapor will be confined. The amount to use to obtain absolute control depends upon individual conditions. In general, the equivalent of one pound to about seventy-five cubic feet of space is recommended. Temperature plays an important part. Moths, like many household insects, though active at 75°F. become inactive at 50°. This is probably due to the fact that their physiological processes are moving at high speed at the higher temperature but slow down at the lower. Hence, poisonous vapors are most effective at the higher temperature. In addition, the amount of toxic vapor given off by paradichlorbenzene that the air will hold at 70° or 75° is much greater than the amount it can contain at 50°. Thus, the higher temperature has a double advantage.

"This matter of concentration emphasizes the importance of providing a really tightly closed space. An ordinary room closet may have tight walls, floor and ceiling, but it has a door, and the door has cracks. Leakage through these cracks constantly decreases concentration of the toxic gas. The cracks should be stopped up to allow the vapor to reach maximum concentration and to do its work. Upholstered furniture presents a different problem, but one which paradichlorbenzene solves. The plan to follow is to apply this product to the amount of about two or three pounds to the covering of a chair or piece of similar size, scattering it by hand down around the cushions, especially where they touch the back and sides of the piece, and into the spaces at the side and back. The inside should be made accessible for treatment wherever possible by loosening the covering on the back.

"After application, the furniture should be covered immediately with some material that will retain the vapors. Blankets spread over the top and brought down to the floor serve the purpose. Wrapping paper or newspapers between the blankets assure greater concentration of the vapors. If the vapor is confined long enough and in sufficient concentration, all stages of the moth will be killed. It is a good idea to allow several days at summer temperature, although excellent results have been obtained by a two-day exposure in very warm summer weather."

Reilly

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Hudson offers still further improvements in sprayers for 1935. Get all the facts before going ahead on *your* program. There is a special Hudson representative near you.

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SANITARY SUPPLIERS MEET JUNE 12

The annual convention of the National Sanitary Supply Association, composed of manufacturers and distributors of janitor and sanitary supplies of all kinds, will be held this year at the Morrison Hotel, Chicago, June 12-14. A good turnout of distributors from all parts of the country is expected and as usual manufacturers will have displays of their products during the three days of the meeting.

Among the speakers scheduled is D. R. Byerly of Procter & Gamble Co., who will speak on "The Selection of the Proper Cleansing Material." Another important subject will be floor maintenance, with four different speakers taking up floor maintenance problems encountered with rubber floors, asphalt tile floors, masonite floors, linoleum floors and cork floors. Another maintenance clinic will consider care of office buildings, hospitals and universities, with three prominent building managers discussing various aspects of these problems.

Entertainment features at the meeting will include a stag buffet and smoker the evening of June 12. At the annual banquet there will be addresses by Mayor Kelly of Chicago and Thomas Hoyne, Comptroller of Customs for the Chicago district. A floor show will also be put on following the addresses.

NEW YORK EXTERMINATORS MEET

A get together dinner was held by the New York Society of Exterminators and Fumigators, the evening of May 14, at the headquarters of the Building Trades Employers' Association. Five ten-minute addresses were scheduled on vital topics to the industry by the following speakers: "Our Trade Association; What It Should Mean to Our Industry," by Sidney Apfelbaum, General Exterminating Co.; "The Law Governing Our Work (Sec. 104) and the Penalty of Disobeying It," by Nathan K. Concannon, executive secretary; "Price Cutting, Its Fallacy; Where Will It End?" by William O. Buettner, Oscar Buettner & Sons; "Rat Poisons—Dangers, Where and Where Not to Use Them," by C. H. W. Hasselreis, Ratin Laboratories; "Fumigation—Its Hazards and How to Operate Safely," by Henry W. Mahler, Mahler Exterminating Co.

Wilson & Bennett Mfg. Co., Chicago, has just bought Ohio Pail Co. of Middlefield, Ohio, and the accounts of the latter company are being taken over by Wilson & Bennett. The manufacture of pails will be discontinued by Ohio Pail Co. as practically every size and style formerly made by them is regularly being made by Wilson & Bennett.

A concern located in Caracas, Venezula, is interested in establishing an agency arrangement with an American manufacturer of insecticides. Interested concerns may communicate through the U. S. Bureau of Foreign & Domestic Commerce, mentioning inquiry number 8681.

CHICAGO SANITORS ADOPT ETHICS CODE

Affiliated Sanitary Supply Distributors of Chicago, at its April meeting, adopted a Code of Ethics for members. This association was started in June, 1932, and has grown steadily until now it is fairly representative of the industry in Chicago. One valuable function of the association is the operation of a credit exchange by means of which all members are advised of accounts more than 90 days in arrears. Mr. Roy L. Wilson, secretary of the association, is in charge of the credit exchange. The association holds a closed meeting the second Tuesday of every month. Included in the membership are such firms as American Standard Mfg. Co., Arthur Beck Co., Central Mills Co., Chicago Sanitary Products Co., Albert J. Dushek, Hirschberg Brothers, Haag Laboratories, Hysan Products Co., Laboratory Products Co., Lekko Soap Co., Riddiford Brothers, Rollins Supply Co., L. J. White Co., Wholesale Janitor Supply Co. and Ludwig Wilson Co. The association was formed to better the conditions in the janitor and sanitary supply business in Chicago.

O'Cedar Corp., Chicago, have devised a novel plan for packaging their liquid wax. A sample can of the wax is attached to the regular 85 cent size can. If the purchaser is not satisfied with the product after using the sample, a full refund can be obtained by returning the large can. O'Cedar decided to use this type of package for their liquid wax as a result of the success last year of a similar plan worked in connection with their furniture cream polish.

Monsanto Chemical Co., St. Louis, has just issued a new booklet on "The Use of Santophen for the Reinforcement of Disinfectants". This new product is described as a very powerful and efficient germicide, especially designed for use as a reinforcing agent in coal tar disinfectants. The addition of two to three per cent of Santophen to a coal tar disinfectant is said to give a solution possessing a phenol coefficient as high as ten. Copies of the booklet may be obtained through SOAP.

Electric Sprayit Co., Milwaukee, Wis., are introducing a new model sprayer known as the Sprayit Imperial Sanitator. The new models, which are said to incorporate a new atomizing principle, are equipped with an adjustable extension nozzle and variable volume control. If desired the sprayer is also equipped with an automatic time switch.

Of three different chemical methods of estimating the active principle of pyrethrum flowers, Gradinger-Corl's colorimetric method is recommended. No difference in the pyrethrin content was found between the young or old plants. Dry Japanese pyrethrum flowers contain on an average 0.97 per cent of pyrethrins. The quality of mosquito-repelling incense depends on the amount of pyrethrum flower used. T. Nagasawa. *Depts. Imp. Ind. Research Inst.*, Osaka (Japan) **15**, No. 10, 1-81.

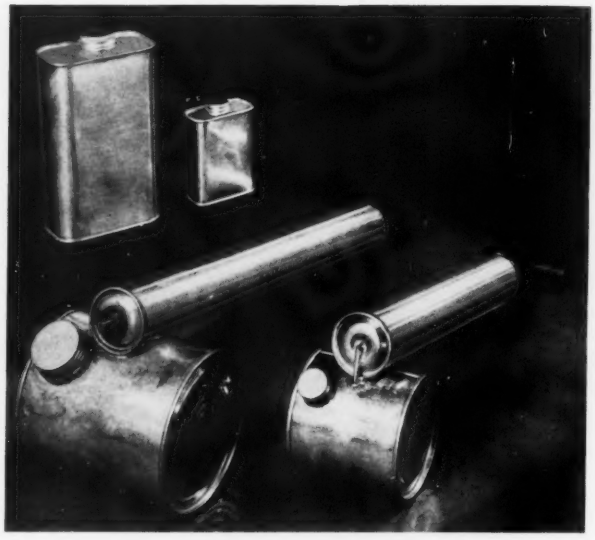
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VOGEL metal cans from 2 oz. size up for insecticides, disinfectants, floor waxes, polishes, etc. . . . any shape, any style . . . a dozen to a million . . . plain or decorated.

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CONDEMNS DISINFECTANTS IN SCHOOLS

In a syndicated "health" column which appears in numerous newspapers throughout the country, Dr. William Brady, well-known writer whose specialty appears to be condemnation of most anything, condemns the use of disinfectants in school lavatories. He says in part:

"School superintendent from a nearby city inquires whether disinfectants for use in school lavoratories are approved by health authorities. He has gained the impression from reading this column that the use of such odoriferous disinfectants is wasteful and unnecessary.

"No health authority or sanitarian has the cheek to advise or sanction the use of such 'disinfectant.' But the petty grafter has to be provided for somewhere, since it is difficult to cut in on the huge salary budget of the school system, and so the amiable politicians on the board of education toss these little favors to the gleaners. A deserving henchman in the local ring probably has an understanding with the manufacturer or distributor of the noisome nostrum, which permits a nice cut from the fancy price nominally charged for the 'disinfectant.' As a matter of fact the materials commonly used in that way are indifferent disinfectants anyway.

"Citizens whose senses are offended by the crude practice should resent the affront to their intelligence and register protests with the municipal, postoffice, railroad, steamship or hotel people who maintain such nuisances. That sort of reaction, if you're not beholden to the great ones or afraid of your shadow, will bring a new ideal in cleanliness and decency in such places.

"The motive for the use of loud smelling 'disinfectants' in lavatories is consciousness that the facilities provided are primitive and unfit for decent people to use. Those responsible hope to disguise this by distracting the patron's attention with a different odor. Unfortunately the patron is as likely as not to believe that the powerful chemical aroma somehow does protect him against the risk of disease.

"The money inexcusably spent for such hocus-pocus would in time pay for removal of the unsanitary door knob or handle, the antiquated hand faucet and other things patrons are needlessly required to touch, and the substitution of equipment of automatic or foot control. In this day of common sense in hygiene there is no reason why the patron of a lavatory should be required to contaminate himself. If the place is properly equipped he may wash his hands, dry them and go on his way without having contacted anything possibly contaminated by any one else. That's what the word sanitary means.

"Plain soap and ordinary water is the only antiseptic or disinfectant, and the best one we have for such places. No amount of chemical or medicinal odor can take the place of soap and water."

♦

A special liquid antiseptic soap for use in hospitals and by surgeons is made in England by saponifying olive oil or oleic acid with caustic potash, dissolving the soap thus formed in alcohol, then adding mercuric iodide dissolved in a small quantity of potassium iodide solution. If the mercuric iodide is added alone, reaction occurs between the mercury salt and the soap to produce a dirty green, water-insoluble soap of no value.

♦

Tanglefoot Co. was low bidder in a recent Veterans' Administration opening covering various quantities of insecticides as follows: 200 gals. insecticide, $125.80; 15 gals., $9.54; 10 gals., $6.25; 150 gals., $90.60; 80 gals., $48.96.

TATTERSFIELD TO VISIT U. S.

Dr. F. Tattersfield, head of the Department of Insecticides and Fungicides of the Rothamsted Experimental Station at Harpenden, Herts, England, and widely known authority on pyrethrum, derris, and other insecticides, as well as the author of the Tattersfield Method for the determination of pyrethrins, will arrive in the United States late in May for a stay of several weeks. During his stay, he plans to visit a number of state experimental stations, the Bureau of Entomology at Washington, the Boyce Thompson Institute, the Mellon Institute, and others. He will also make a short address at the summer meeting of the National Association of Insecticide & Disinfectant Manufacturers at Chicago on June 11. During his stay in the United States, Dr. Tattersfield will be the guest of S. B. Penick, president of S. B. Penick & Co., New York.

♦

Baldwin Laboratories, Saegertown, Pa., ran a very unusual insert in the April issue of *Progressive Grocer*, advertising their "Dwin" insecticide. The stock on which the advertisement was printed was impregnated with the identical odor used in perfuming "Dwin," giving the reader a first hand impression of the product.

♦

S. C. Johnson & Son, Racine, Wis., maker of "Johnson's" floor wax and auto wax, has added a second air show to its radio advertising program. The new show will feature Fibber, McGee and Mollie, a comedy team. "The House by the Side of the Road," which has been sponsored by Johnson for two years, will be continued.

♦

Metal Package Corp., New York, will operate in the future under the name of the National Can Co. for the purpose of having the name of the company more indicative of the nature of its business. The change in name involves no change in management or policies.

♦

Frank Rose Co., Chicago, is now handling advertising for Murray & Nickell Mfg. Co., "Mortex" mothproofing spray, and J. C. Paul & Co., "Burnishine" metal polishes and cleaners.

♦

W. S. Landis, vice-president of American Cyanamid & Chemical Co., spoke on the subject of "Inflation and the Business Man" at a dinner meeting of the drug chemical and allied trades section of the New York Board of Trade, held April 30 at the Drug & Chemical Club, New York.

How To Use a Disinfectant

When a large consumer asks your salesmen the whys and wherefores about the use of disinfectants, are they equipped to give the right answers? How, when and where to use coal-tar disinfectants will be discussed in an early issue of *Soap* by Eugene Kohn,—with a background of 20 years experience in the business.



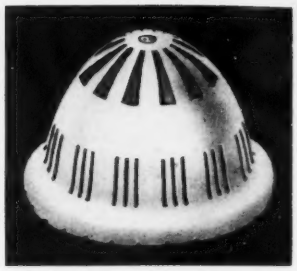
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GERMICIDAL DETERGENTS

(*From Page 28*)

point as well as from the germicidal requirements to specifically add a suitable wetting and emulsifying agent.

The oldest, most common, and cheapest wetting and emulsifying agents in use are the various soaps. More recently several newer types of detergents[3] have been developed which present for many purposes special advantages over ordinary soaps. One of the most important advantages is that most of these wetting agents are not thrown out of solution by the Calcium and magnesium salts present in hard water. Another advantage is that many of them are stable and maintain their good detergent properties over wide pH ranges.

A present deterrent to the application of these newer agents to many problems is their high cost. For this reason, together with the fact that there has recently been developed a new method of overcoming the hard water troubles encountered in the use of ordinary soaps, we have in this study attempted to make use of the common type of soaps which were shown in Table VIII to be most effective germicidally. These are soaps consisting chiefly of sodium resinate, sodium laurate, and/or sodium oleate.

Some studies of the newer types of wetting and emulsifying agents have been made in this connection also but the results will not be presented in this paper.

There are many combinations of "buffer" salts which will provide a given pH in a solution of given concentration. Not all combinations providing the same pH for solutions containing the same soaps and phenolic compounds will have the same detergent values, even though these solutions may have the same killing power.

Mixes containing as buffer salts various proportions of one or more of the commonly used detergent alkalies, such for instance, as sodium silicates, borates, carbonates, and phosphates, were tested. The addition of various other materials, such for instance as ammonium chloride, Glauber's salt, aluminum sulfate, and bentonite, was also tried. No mixture of these materials with the indicated soaps gave the quality of results desired, especially in hard water, although some mixes gave good results as compared to many products now in use for such detergent purposes.

The hardness of the water used has an important influence on the detergent results obtained. The calcium and magnesium salts in the water react with the soap and/or buffer salts to give compounds which are but little soluble. These compounds, under the conditions of practical use, can usually be only partially rinsed off the washed articles. In time objectionable deposits are built up on these articles. The type and extent of the deposits formed depends upon the water hardness and temperature, the type of soil, the nature of the surface being cleaned, the soap and buffers used, the washing procedure, and other such factors. The prevention of this deposit formation has been one of the biggest problems in this particular field.

As already indicated when hard water was used to wash glassware and dishes, no mix made up of the customary washing alkalies, with or without soaps, was found free from this deposit difficulty, especially



Photograph III

25 Cycles with No. 488 Perfectly Clean Control Glass 25 Cycles with No. 527

THE *Manufacturing* CHEMIST

PHARMACEUTICAL COSMETIC
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Embracing the Manufacture of Drugs, Pharmaceuticals, Cosmetics, Toilet Preparations, Photographic Materials, Soaps, Fine Chemicals, Essential Oils, Perfumes, Dental Preparations, Patent Foods and Medicines in Liquid, Powder, Paste, Pill and Tablets, Polishes, Antiseptics, Germicides.

- Foot Preparations, by Dr. Zernick and Dr. Light.
- The Value of Salts in Dentifrices, by Karl Pfaff.
- The Acid Stomach, by F. C. Hobart.
- Indigestion Remedies.
- Eye Preparations, by M. G. de Navarre.
- Transparent Foils, by Dr. Louis Light.
- The Perfume of the Hyacinth, by H. S. Redgrove.
- The Malaria Scourge, by Dr. Konrad Schulze.
- Notes on the Manufacture and Testing of Contraceptives, by Dr. C. I. B. Voge.
- The Production of Stable Emulsions, by G. H. Wray.
- Manufacturing Face Powder, by S. P. Jannaway.

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when the washed articles were allowed to air dry without toweling. The use of tetra sodium pyrophosphate in the mixes gave considerably improved results but the deposits were not entirely prevented by this means.

Prompt and careful toweling will, of course, help keep down the deposits but this adds materially to the labor costs. Furthermore, toweling may, in part at least, defeat the germicidal accomplishments of the washing process. Some chemical means of preventing deposit formation was sought.

Through the efforts of Dr. R. E. Hall and his associates, sodium hexametaphosphate has recently been made available commercially[8] [9]. This compound has the remarkably valuable property of holding calcium and magnesium in solution to such an extent as to make hard water clear and soft, and free from calcium and magnesium precipitates. When proper amounts were used in the washing solutions complete freedom from hard water deposits was obtainable. The remarkable effects are illustrated by photographs of glasses washed in solutions of different mixes.

The glasses shown in the photographs were washed along with soiled dishes, aluminum and silverware in a domestic type of dishwashing machine following the washing and rinsing procedure recommended by the manufacturers of the dishwashing machine except that all of the articles were allowed to air-dry without any toweling. Water of the same hardness, about 170 p.p.m., was used for these comparative tests. The soil used was a mixture of equal weights of butter, crisco and molasses, melted together. Temperatures and all other conditions were maintained as nearly as possible the same for each test, the only difference being the mix of chemicals used to make up the washing solution.

The cycle of soil, wash, rinse, and air-dry was repeated a number of times and the film deposits noted as the process was continued. The photographed glasses illustrate the results with three mixes, each used in a 1% solution.

The mixes used in these experiments were of the following composition:

Table IX.

Number of Mix	*No.* 488 %	*No.* 513 %	*No.* 527 %
Sodium chlororthophenyl phenolate	1	1	1
"GU" brand sodium silicate*	3	3	3
Dry sodium resinate	10	10	10
Sodium hexametaphosphate**	13	..	..
Tetra sodium pyrophosphate† ("pyro")	..	..	13
Sodium carbonate	15.5	20	15
Sodium bicarbonate	57.5	66	58

Photograph I represents the results after 9 cycles. Glass A was washed with a 1% solution of mix No. 488. Glass B with a 1% solution of mix No. 513. And Glass C with a 1% solution of mix No. 527.

Photograph II represents the result after further washings. It was the intention to carry all these experiments through 25 cycles. Glass D had 25 washings with mix No. 488 and Glass F, 25 with mix No. 2. The deposits on the glasses washed with mix No. 1 became so bad, however, that the experiment was discontinued at the end of 14 cycles. Glass E represents the result.

These photographs indicate the remarkable advantage to be obtained by using the metaphosphate. They also show that a lesser improvement is obtained by the use of the same amount of anhydrous tetra sodium pyrophosphate, which according to Hall, et al., is capable of taking care of magnesium hardness but not of calcium hardness.

Note: It might be mentioned that in certain experiments with mixes consisting mainly of T.S.P. and containing no soap or other such material, but containing very small amounts of metaphosphate or "pyro", somewhat better results were obtained with the pyro mixes. The film formation appeared to be more than from the metaphosphate mixes, but the glasses drained very evenly to give a uniform appearing surface. The metaphosphate mixes gave less film but the rinse water drop marks were so large and conspicuous that the metaphosphate glasses looked much worse than those washed with the pyro mix. Of course, if toweling were employed the spots would not be formed and the metaphosphate mix would give somewhat better results.

Photograph III is included to give a comparison between a perfectly clean Glass H and Glasses G and I, which have been through 25 cycles with mix No. 488 and mix No. 527 respectively. The glasses used for the experiments contained some small bubble flaws which appear on the photographs as tiny, solid specks and are not to be confused with the somewhat larger open water marks which are on all the washed glasses but not on the control glass H.

NUMEROUS experiments of this sort as well as practical hand dishwashing tests indicated that good detergent results could be obtained within the limits set up by the germicidal requirements. They also showed that the proper use of sodium metaphosphate would give results in hard water far superior to those obtainable by the use of any mix which did not contain this newly available material. The small amount of sodium silicate used in these formulas provided complete protection of aluminum against the corrosive action of the other alkalies when the mixes are used in the recommended concentrations.

A new type of germicidal product had thus been developed which possessed good detergent properties and which in use had no detrimental effect upon aluminumware. It remained to be determined if this type of product was germicidally effective against a wide variety of micro organisms representative of those of interest from a public health standpoint.

A typical mix, No. 1000, was selected for this purpose. It is identical with mix No. 488 except that it contains 15% of sodium resinate instead of 10% and a correspondingly lower percentage of the carbonates.

It is recommended that this particular mix be used in a 1% solution and when so used is germicidal at the recommended temperature of 45° C. It is of course understood that mixes of varying degrees of potency may be made by varying the three controlling factors, namely pH, phenol content, and soap content. It should be further noted also that this type of germicide is not

* From Philadelphia Quartz Co., Philadelphia.
** From Calgon, Inc., Pittsburgh.
† Anhydrous from The Swann Chemical Co., St. Louis.

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Lowell Manufacturing Co.
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Opposite Navy Pier—Chicago, Ill.

used up nor materially weakened by the presence of organic matter in amounts likely to be encountered in this field.

Typical results with mix No. 1000 are shown in tables X. XI. and XII.

Table X.

Temp. 37° C. *Test Solution* %	No.	*Test Organism*	—*Plate Counts*— 5′	10′
1 of	1,000	Staphylococcus aureus (Insecticide Board strain)	100	10
1 of	1,000	Escherichia coli (Univ. of Minn. strain)	20	2
1 to	1,000	Eberthella typhi	0	0
1 to	1,000	Streptococcus lactis	0	0
1 to	1,000	Streptococcus hemolyticus	0	0
1 of	1,000	Pneumococcus (Type I)	0	0

Table XI.

Temp. 45° C. *Test Solution* %	No.	*Test Organism*	—*Plate Counts*— 1′	3′	5′	10′
½ of	1,000	Staphylococcus aureus (Insecticide Board strain)			500	100
½ of	1,000	Escherichia coli (Univ. of Minn. strain)			150	20
½ of	1,000	Eberthella typhi			0	0
½ of	1,000	Streptococcus lactis			0	0
½ of	1,000	Streptococcus hemolyticus			0	0
½ of	1,000	Pneumococcus (Type I)			0	0
½ of	1,000	Corynebacterium diphtheriae	0	0	0	0

Table XII.

Temp. 45° C. *Test Solution* %	No.	*Test Organism*	—*Plate Counts*— 1′	3′	5′	10′
1 of	1,000	Staphylococcus aureus (Insecticide Board strain)	300	20	0	0
1 of	1,000	Escherichia coli (Univ. of Minn. strain)	200	0	0	0
1 of	1,000	Eberthella typhi	0	0	0	0
1 of	1,000	Streptococcus lactis	0	0	0	0
1 of	1,000	Streptococcus hemolyticus	0	0	0	0
1 of	1,000	Pneumococcus (Type I)	0	0	0	0
1 of	1,000	Corynebacterium diphtheriae	0	0	0	0
1 of	1,000	Megatherium (24 hour culture)	..	..	0	0

Tests are being continued on variations of the ideas here presented and on the application of this type of germicidal detergents to other fields of industrial service.

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WHY YOU CAN BE SURE *with* COAL TAR PRODUCTS FROM KOPPERS

1. KOPPERS IS ONE OF THE TWO LARGEST PRODUCERS OF COAL IN THE UNITED STATES
This has given Koppers a thorough knowledge of the coals from which tar products are produced.

2. KOPPERS BUILT OVER 75% OF ALL THE BY-PRODUCT OVENS IN THE UNITED STATES
This has made Koppers more familiar than any other organization with the processes of tar production.

3. KOPPERS IS ONE OF THE THREE LARGEST PRODUCERS OF CRUDE TAR IN THE UNITED STATES
This has kept it in intimate daily contact with the practical side of the production of coal tars and their products.

DEPEND ON KOPPERS FOR COAL TAR PRODUCTS

TAR ACIDS
CRESOL, U. S. P.
PHENOLS
CRESYLIC ACID
98% to 100% STRAW COLOR
TAR ACID OILS
NEUTRAL HYDROCARBON OIL

KOPPERS PRODUCTS COMPANY
KOPPERS BUILDING
PITTSBURGH, PA.

for Product Protection, Economy *and* Customer Good-Will— E-Z SEAL STEEL BARRELS



Full Removable Head

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Simple, Sealing Rings

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Indestructible Covers

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Air and Liquid-tight

●

High Second-Hand Value

Many famous brands of liquid, semi-solid, crystal, and powder products are now regularly shipped in *E-Z SEAL Barrels* to insure *product safety, customer preference,* and *economies in packing and shipping.* Simple, easy-to-operate sealing rings securely fasten the cover in place, making a positive, leak-proof closure.

Get the added prestige for YOUR Product that E-Z SEAL Barrels give!

GET ALL THE FACTS ON THESE PRACTICAL MODERN BARRELS — NO OBLIGATION TO YOU

We manufacture a complete line of modern steel Barrels, Drums, and Pails 1 to 65 gallon sizes.

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Three Modern Factories
Sales Offices and Warehouses in Principal Cities

...how much for smell?

WHETHER it is an undesirable odor in your product which you want to cover,—or whether it is a pleasing fragrance which you desire to add,—whether it be in a

Liquid Insecticide
Para Product
Floor Wax
Cleaning Fluid
Polish
Shampoo

Vioflor

will cut your odor covering or perfuming cost.

VIOFLOR masks undesirable odors to such an extent that much smaller quantities of perfuming material are needed,—a saving of 40 to 50% in perfume cost.

VIOFLOR acts as a fixative for the perfuming agent, saving loss of odor value.

VIOFLOR permits the use of finer, higher priced perfumes at no increase in perfuming cost.

Send for a sample to test in your product.

Manufactured by
CREPIN & DOUMIN, LTD.
LONDON, ENGLAND

Sold in the United States and Canada by

John Powell & Co., Inc.

114 E. 32nd ST. **NEW YORK, N. Y.**

PYRETHRUM HOUSE CHANGES NAME

Effective May 1 the name of W. Benkert & Co., 100 Gold St., New York, pyrethrum and derris, was changed to R. J. Prentiss & Co. The change will in no way affect the management, business policy or personnel of the company. R. J. Prentiss, who took over active control of W. Benkert & Co. fourteen years ago, will continue as president, with other officers the same, including Harold King, vice-president, and J. Miller, treasurer. A new addition to the Benkert organization is A. W. Bevernick, formerly with McLaughlin, Gormley King Co., Minneapolis. Mr. Bevernick will work out of the New York office on sales, spending much of his time in the middle-western states.

HOLD HEARING ON ILLINOIS BILL No. 818

A public hearing on Illinois House Bill No. 818, originally scheduled for April 30, and postponed a week on request, was finally held May 7. The bill contains many features found in the "Tugwell Bill," and among other provisions would require manufacturers of drugs, medicines, cosmetics, etc., from outside the state to pay an annual license fee of $2,500 in order to do business in Illinois. The definition of medicine in the bill would include not only all disinfectants but many insecticides as well, it is reported. The Illinois bill is like the "Tugwell Bill" in that it would subject advertising accompanying products sold to the same strict regulations prescribed for labels.

McAleer Manufacturing Company, Detroit, has appointed Maxon, Inc., as advertising counsel. McAleer products include polishing waxes used by builders of automobiles, primers, lacquers, etc.

Stanco, Inc., New York, have applied for an injunction in the U. S. District Court against the Sun Klean Chemical Co., New York, claiming the container in which Sun Klean Insect Destroyer is sold is confusingly similar to the yellow and black can of their product, Flit.

The new furniture polish of the Three-In-One Oil Co., New York, is packed in a non-slip bottle, whose sides are grooved to fit the hand.

A net profit of $172,501 has been rported by Lehn & Fink Products Company, Bloomfield, N. J., for the quarter ending March 31, 1935. The company's net profit for the quarter ending March, 1934, was $199,710.

Net income of Continental Can Co. for the year ended March 31, 1935, totaled $15,603,677, equal after allowance of $4,916,617 for depreciation and federal taxes, to $4.01 a share on 2,655,191 shares of common stock. In the previous twelve month period earnings amounted to $11,770,762.

Lane Laboratories has been incorporated in Camden, N. J., to make "Silverene," a new silver polish.

Please omit flowers



A good insecticide becomes better when made with ATLANTIC ULTRASENE!

Use this new petroleum product as a base in your insecticides. Ultrasene is uniform and evaporates rapidly. Because it has no kerosene odor and leaves no oily residue, Ultrasene permits you to make flysprays that are particularly acceptable in hotels, bakeries, food markets, dairies, and homes. . . . In color, Ultrasene is more transparent than water. Its flash-point is high.

Insecticide manufacturers have already had *practical* success with Atlantic Ultrasene. A test is convincing. We will be glad to send further information and a generous working sample upon request. If you have any specific problems, our technical experts will be pleased to help you. Simply write to The Atlantic Refining Company, Specialty Sales Department, 260 South Broad Street, Philadelphia, Pa.

ATLANTIC ULTRASENE

★

FACTS FOR YOU

Our Deodorized Insecticide Base:

IS . . . in strict compliance with the specifications of the Nat'l Assn. of Insecticide & Disinfectant Mfrs. for petroleum oil, as specified for testing under the Peet-Grady Method.
IS . . . more highly refined, hence more stable, than ordinary kerosene
IS . . . water white and non-staining
IS . . . absolutely free from objectionable kerosene odor
IS . . . the ideal base to retain the toxic value of insecticides
IS . . . of the correct density for the most effective use in insecticide sprays
IS . . . non-corrosive and exceedingly stable even under prolonged exposure to direct sunlight in glass.

Henceforth it is to be sold under the brand

. . . . "NonOdr" . . . .

We invite your inquiries

O'CONNOR & KREMP

11 West 42nd Street New York City

Manufactured by

BRADFORD PENN REFINING CORP.

Deodorized Petroleum Products

Clarendon, Penna.

SOLVAY

TRADE MARK REG. U. S. PAT. OFF.

PARA-DICHLOROBENZENE

Graded in Size and Form to meet all Insecticide Requirements

One of the many reasons why leading repackers and resellers prefer Solvay Para-dichlorobenzene is the fact that it is available in a wide variety of crystal sizes—thus meeting all particular needs. Carefully graded and uniformly dependable, it is made to satisfy the most exacting requirements as to quality.

For block manufacture as well as packing in shaker top cans, Solvay Para-dichlorobenzene has grown steadily in popularity. Moth killers or deodorants made with it show improved sales—better profits. Immediate deliveries made from stockpoints located throughout the country. Write today for samples and prices.

SOLVAY SALES CORPORATION

Alkalies and Chemical Products Manufactured by The Solvay Process Company

40 Rector Street • New York

COMMENTS ON SWEEPING COMPOUNDS

Fred C. Snyder of John C. F. Snyder & Sons, Inc., Philadelphia, manufacturers of sweeping compounds, comments as follows on the article on "Sweeping Compounds" which appeared in the April issue of SOAP: "We wish to compliment the writer upon the thoroughness displayed in first hand knowledge of the various kinds of sweeping compounds. We feel though that he overlooked some of the higher and more efficient grades wherein the element of moisture is derived entirely from paraffin oil, ranging in content from 15 to 25 per cent by weight. The bases of these products are selected from thoroughly dry materials. We have found throughout years of experience that products containing the slightest degree of water will quickly deteriorate and become ineffective for the purpose intended."

♦

V. P. Adams, Inc., Jamaica, N. Y., is a new firm in the sanitary products field which is reported meeting with unusual success. The company was started last February 1 by Vincent P. Adams, president, to manufacture and distribute sanitary specialties in Metropolitan New York, but chiefly on Long Island. Mr. Adams was formerly for ten years district manager for Brooklyn and Long Island for The West Disinfecting Co., Long Island City. The new organization is employing fifteen people in its service department. Mr. Adams is well-known on Long Island, being active in the affairs of the Lions Club of Jamaica, the Queens Chamber of Commerce, the Elks, and various religious organizations.

♦

S. Carle Cooling of the National Can Co., formerly the Metal Package Corp., and well known in the insecticide and disinfectant industries through his activities in the national association, has been nominated in Baltimore, Md., as the Republican candidate for President of the City Council.

♦

DEODORANT BLOCKS ON DECLINE?

(*From Page 90*)

this or that manufacturer to digress into the making of the old type of deodorant in attempts to capture a low-price market.

It is probably well to expect and prepare for many such advances from time to time as national recovery proceeds. It would be quite natural to anticipate for there must be a gradual rise in price levels and with that rise, there must naturally be a greater span in dollars and cents between the cost of the best and the cost of the cheapest.

If manufacturers of the highest quality deodorant blocks should be swayed by slight or temporary inroads made by poorly-made competitive products, the whole industry must necessarily suffer in the end. There is still a potential market for many times the present production of deodorant blocks, but it will be supplanted by some other type deodorant unless the high quality standards of the present blocks are maintained, or higher quality achieved.



Floors Like This Are A Tremendous Market For LIGHTNING LUSTRE

The millions of square feet of floor surfaces offer you a vast, ready-made market. Every type of building with every kind of floor is a prospect. To reach them and satisfy them you need Lightning Lustre—the ideal self-polishing water wax.

It is one of the famous line of Federal Specialized Floor Finishes and is the result of many years research, rigid tests and work in the field with the manufacturers of various floor coverings.

SIMPLIFIED AND ECONOMICAL APPLICATION

Lightning Lustre is applied with a short strand cotton mop or lamb's-wool applicator. Large surfaces are covered easily and quickly. Cuts maintenance costs because of the labor it saves. It dries in about fifteen minutes with a hard lustrous finish that only requires occasional buffing to retain and enhance its lustre.

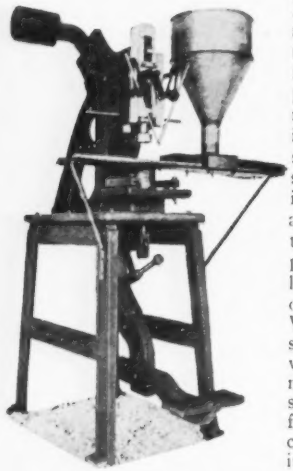
FOR ALL TYPES OF FLOORS

As a maintenance finish for all types of floors, linoleum, terrazzo, rubber, wood, composition, tile, etc., Lightning Lustre is unsurpassed. It is a product of the world's largest producer specializing in floor preservatives and finishes.

Write for prices, samples and complete information.

Federal Varnish Company
337 South Peoria St., Chicago, Illinois

Machine-Made
DEODORANT
CAKES and BLOCKS
are big sellers!



Make your deodorant and moth cakes with this heavy pressure foot press by the cold process and save money while you are increasing sales. A smooth, even cake will sell better because of its improved appearance and will cost less to make because this press not only cuts labor but saves 5% of your raw material. Why not let us make some sample cakes with your own para, naphthalene, etc., and submit complete information regarding cost and manufacturing process?

HOUCHIN MACHINERY CO., INC.
HAWTHORNE, N. J.

A SATISFIED CUSTOMER "TAKES HIS PEN IN HAND"

April 1, 1935

AN-FO Mfg. Co.
Oakland, Calif.
Gentlemen:

Ship immediately three drums AN-FO No. 20 on our contract, and be sure it is as strong as we got from your last year. Our salesmen express satisfaction with our last year's .... Brand Fly Spray, saying it was the first year they had no "kicks."

We used only AN-FO No. 20 last year. Keep up the strength and you'll keep our business.

Yours truly,
(Signed).....

AN-FO BRAND No. 20

PYRETHRUM EXTRACT
KILLS MORE FLIES
AN-FO MFG. CO. OAKLAND, CAL.

HAMMOND
Offers You
Odorless, Stabilized*
PYRETHRUM EXTRACT

Two concentrations, 20 to 1 (20 lbs. of pyrethrum per gallon), and 5 to 1.

We import pyrethrum flowers direct from Japan. From these we prepare extracts of standardized strength in a deodorized petroleum base, stabilized* against deterioration.

Our prices for these superior Extracts are competitive with those of other extracts.

Other Hammond Specialties

Granulated Pyrethrum Flowers, ready for percolation.
Rotenone Extracts, stabilized against deterioration.
Rotenone—Pyrethrum concentrates of various proportions and strengths.

Write us for samples, prices and further information

HAMMOND PAINT & CHEMICAL CO.
Quality Products Since 1875
71 Ferry St. **Beacon, N. Y.**
*Trade Mark Reg., Pat. Applied for

CRYS-TINTS

PERFUME and color Para Blocks and Crystals, Bath Salts and Moth Balls in one operation.

The use of Crys-Tints eliminates doubtful results for they provide uniform distribution of Odor and Color and are extremely lasting and stable.

Orange Blossom	**Narcisse**	**Violet**
New Mown Hay	**Wisteria**	**Lilac**
Carnation	**Oriental**	**Rose**
Lavender	**Jasmin**	**Pine**

8 OUNCES TO 100 LBS., RECOMMENDED

$1.50 per Lb.
Double Strength, $2.90 per Lb.
Series D—Uncolored, $ .50 per Lb.
Series E—Uncolored, $1.00 per Lb.

Compagnie Parento, Inc.

CROTON-ON-HUDSON, N.Y.
NEW YORK CITY TORONTO

CHICAGO MEETING JUNE 10-11

(*From Page 88*)

4:15..Summary of events of day.
Announcements.
4:30..Adjournment for day.

Tuesday, June 11th—A. M.

10:00..Meeting called to order.
Communications.
10:15..Report of Insecticide Committee,—"The Market Situation in Household Insecticides," — W. G. Griesemer, The Black Flag Co., Baltimore, Md.
10:30..A Summary of Current Literature and Patents, O. M. Poole, Derris, Inc., New York.
10:45..Report of Insecticide Standards Committee,—"Commercial Aspects of the Peet-Grady Test,"—Dr. Alfred Weed, John Powell & Co., Inc., New York.
11:00..Intermission.
11:15..Report of Sanitary Supply Sales Committee, S. S. Selig, The Selig Co., Atlanta, Ga.
11:30..Report of Sanitary Specialties Committee,—"The Increased Importance of Sanitary Specialties,"—L. B. Schwarcz, Clifton Chemical Co., New York.
12:00.."Summary of Activities of Various State Legislatures," John H. Wright, Zonite Products Corp., New York.
12:30.."Pending Federal Food and Drug Legislation," James F. Hoge, New York.
Announcements.
Luncheon.

Tuesday, June 11th—P. M.

2:00..Meeting called to order.
Communications.
Report of Resolution Committee.
2:15..Report of Disinfectant Standardization Committee, B. G. Philbrick, Skinner & Sherman, Inc., Boston, Mass.
2:20.."An Attack on the Law of Diminishing Returns on Disinfectant Sales," W. B. Eddy, The Rochester Germicide Co., Rochester, N. Y.
2:40.."A Discussion of Steam-Distilled Pine Oil Relative to Its Efficiency as a Disinfectant" by —G. F. Hogg and B. H. Little, Hercules Powder Co., Inc., Wilmington, Del.
3:00 "The Limitations of the B. Typhosus Phenol Coefficient as a Measure of the Bactericidal Value of Coal-Tar Disinfectants," Dr. Emil Klarmann, Lehn & Fink, Inc., Bloomfield, N. J.
3:15..Report of Antiseptic Committee, Dr. G. F. Reddish, Lambert Pharmacal Co., St. Louis, Mo.
3:40..Dr. Robert C. White, Councillor to the U. S. Chamber of Commerce.
3:55..New Business.
Unfinished Business.
Announcements.
4:30..Final Adjournment.

Bristol-Myers Co. and subsidiaries earned net profit of $550,949 during the first quarter of 1935, equal to 79c a share on 694,998 shares of capital stock outstanding. This compares with $669,213, or 95c a share, for the corresponding quarter of 1934. An extra dividend of 10c a share has been declared, in addition to the regular 50c dividend, both payable June 1.

John Boyer, formerly sales manager of Mathieson Alkali Works, and later of the Monsanto Chemical Co., Calco Chemical Co., and more recently with Filtration Engineers, has resigned this latter connection.

ONE UNIFORM QUALITY

ALWAYS

That's Why We're "Your Most Logical and Economical Source of Supply" For—

INSECTICIDES

HOUSEHOLD FLY SPRAYS
MOTH SPRAYS
PERFUMED INSECTICIDE
LIQUID INSECTICIDE
SPECIAL PHENOL INSECTICIDE
X Y Z INSECTICIDE
POULTRY LICE OIL
DARK AND LIGHT COLORED CATTLE SPRAYS
PINE CATTLE SPRAY
ETC.

CLEANING COMPOUNDS

PINOLAVE—MAGIC CLEANER
PINE SCRUB SOAP
METAL POLISH
LIQUID TOILET BOWL CLEANER
GARAGE FLOOR CLEANER
FLUSH KLEEN
DRAIN PIPE OPENER
LIQUID SOAPS
WATERLESS CLEANER
ETC.

DISINFECTANTS

COAL TAR DISINFECTANTS
PINE OIL DISINFECTANTS
PINE ODOR DEODORANTS
TECHNICAL CRESOL COMPOUND
IMPERIAL FORMALDEHYDE SPRAY
CHLORINE FORMALDEHYDE SPRAYS
ETC.

REQUEST FURTHER INFORMATION

THE CHEMICAL SUPPLY COMPANY

2450 CANAL ROAD
CLEVELAND, OHIO

"SINCE 1898"

MEMBER
NATIONAL INSECTICIDE AND DISINFECTANT MFRS. INC. 1914

Good REBUILT MACHINERY *for* SOAP MANUFACTURERS

H-A 1500, 3000, 4000, 5000 lbs. capacity. Steam Jacketed Crutchers.
Dopp Steam Jacketed Crutchers, 1000, 1200, 1500 lbs. and 800 gals. capacity.
Ralston Automatic Soap Presses.
Scouring Soap Presses.
2, 3, 4, 5 and 6 roll Granite Toilet Soap Mill.
H-A 4 and 5 roll Steel Mills.
H-A Automatic and Hand-Powered slabbers.
Proctor & Schwartz Bar Soap Dryers.
Blanchard No. 10-A and No. 14 Soap Powder Mills.
J. H. Day Jaw Soap Crusher.
H-A 6, 8, and 10 inch Single Screw Plodders.
Allbright-Nell 10 inch Plodders.
Steel Soap frames, all sizes.
Steam Jacketed Soap Remelters.
Automatic Soap Wrapping Machines.
Glycerin Evaporators, Pumps.
Proctor & Schwartz large roll Soap Chip Dryers complete.
Doll Steam Jacketed Soap Crutchers, 1000, 2000 and 1350 lbs. capacity.
Ralston and H-A Automatic Cutting Tables.
Soap Dies for Foot and Automatic Presses.
Broughton Soap Powder Mixers.
Williams Crutcher and Pulverizer.

Good REBUILT MACHINERY *for* Sanitary Product Manufacturers

Empire State, Dopp & Crosby Para Presses.

Filling and Weighting Machines for Flakes, Powders, etc.

Sperry Cast Iron Square Filter Presses, 10, 12, 18, 24, 30 and 36 inch.

Perrin 18 inch Filter Press with Jacketed Plates.

Gedge-Gray Mixers, 25 to 6000 lbs. capacity, with and without Sifter Tops.

Day Grinding and Sifting Machinery.

Schultz-O'Neill Mills.

Day Pony Mixers.

Gardiner Sifter and Mixer.

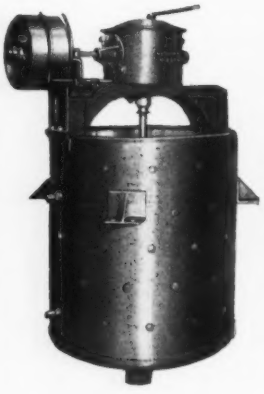
Day Talcum Powder Mixers.

All types and sizes—Tanks and Kettles.

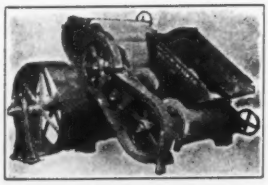
National Filling and Weighing Machines.

New SOAP CRUTCHERS

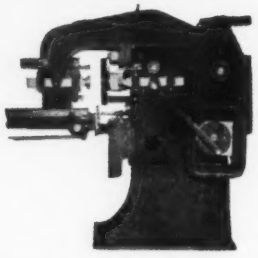
This Newman brand new, all steel steam jacketed soap crutcher. Will crutch any kind of soap. We also build another crutcher especially adapted for laundry soap in addition to other new soap machinery such as frames, cutting tables, etc. Send for complete list.



Rebuilt *Specials!*



H-A SOAP MILL
This 4-roll granite toilet soap mill is in A-1 shape. Latest and largest size rolls.



4 JONES AUTOMATIC combination laundry and toilet soap presses. All complete and in perfect condition.

All used equipment rebuilt in our own shops and guaranteed first class condition.

Send us a list your surplus equipment—we buy separate units or complete plants.

NEWMAN TALLOW & SOAP MACHINERY COMPANY 1051 W. 35th St. CHICAGO

Our Forty Years Soap Experience Can Help Solve Your Problems

CLASSIFIED ADVERTISING

Classified Advertising—All classified advertisements will be charged for at the rate of ten cents per word, $2.00 minimum, except those of individuals seeking employment where the rate is five cents per word, $1.00 minimum. Address all replies to Classified Advertisements with Box Number, care of *Soap*, 254 West 31st St., New York.

Note: All advertisements must be in publisher's hands by the first of the month for that month's issue.

Positions Wanted

Position Wanted by chemist having many years' experience, with prominent firm, in manufacturing and chemical control of arsenical cattle dip, disinfectants, insecticides, etc. Broad analytical experience. Have efficient follicular mange remedy, flea and louse powder, and worm medicine for dogs. Important field. Salary reasonable. Address Box No. 557, care *Soap*.

Position Wanted by Soapmaker, practical man with long years' experience in manufacturing laundry soaps, bar, potash and specialty soaps, shampoo bases, liquid soaps, etc. Salary reasonable. Address Box No. 560, care *Soap*.

Practical Soap Maker—Twenty years' experience in manufacture of laundry, toilet, textile, chip soaps, soap powders, etc. Recently in charge of boiling operations at large plant. Best references. Address Box No. 562, care *Soap*.

Insecticides—Plant superintendent and chemist who has had twenty years' experience in manufacturing insecticides and ten years' experience with biological and chemical control of leading fly spray manufacturer, seeks new connection. Highest references. Address Box No. 564, care *Soap*.

Sales Manager—Seven years' personal sales promotion experience opening new accounts for national concern, metropolitan New York territory, selling soaps, powders, detergents, to hotels, institutions, hospitals and restaurants. Large personal following. Self-starter. Gilt-edge references. Present employed. Minimum salary $5,000.00. P. O. Box 34, Woodhaven, N. Y.

Sales Executive—experienced in marketing, agricultural and household insecticides. Conducted extensive research project on development of derris, pyrethrum sprays, dusts and spreaders. Seeks new connection. Address Box No. 539, care *Soap*.

SOAP MACHINERY

Every item shipped from our shops at Newark, N. J., is thoroughly overhauled and rebuilt before shipment.

SPECIALS

1—Soap Chip Dryer, 1200 lb.
2—Dopp 650 gal. Steam Jacketed Kettles.
1—Dopp 1200 lb. Steam Jacketed Crutcher.
1—Hershey 1000 lb. Horizontal Jacketed Crutcher.
1—1000 lb. All Steel Soap Powder Mixer.
2—Holmes & Blanchard 24″ and 36″ 4 cage Disintegrators, for grinding soap powder—no screens, no plugging.

25—Soap Frames, 60″x45½″x14″, with trucks.
6—Plodders, Houchin, Rutschman, 4″, 4½″ double screw, 6″, 8″, 10″.
14—Filter Presses, 42″x42″ to 12″x12″.
8—Granite Mills, 3 and 4 roll, 12″, 18″ and 24″.
15—Horizontal Mixers, Jacketed and Plain, 15 gal. to 1000 gal.

MISCELLANEOUS—Kettles, Mixers, Pony Mixers, Powder Fillers, Tube Fillers, Labelers, Soap Presses, Soap Wrappers, Tanks, Boilers, Pumps, etc.

Send for Latest Bulletin.

CONSOLIDATED
PRODUCTS COMPANY, INC.

15-21 Park Row, N. Y. C. BArclay 7—0600

We buy your idle Machinery—Single items or entire plants.

SHAVING CREAM

TOOTH PASTE

In
Bulk
Or

Under Your Own Name in our special tubes and cartons. These are lithographed with a blank space for *YOUR* label. In any quantity from one gross up.

GEO. A. SCHMIDT CO.
INCORPORATED
Manufacturers of SOAPS *of Every Description*
236-238 West North Avenue
Chicago

BLANCHARD

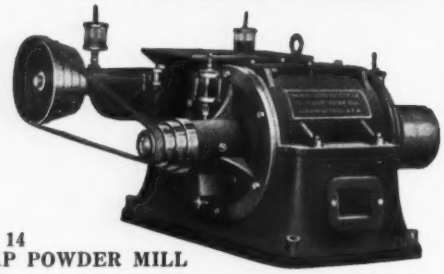
SOAP POWDER MACHINERY



NO. 9 CRUSHER



NO. 10-A SOAP POWDER MILL



NO. 14
SOAP POWDER MILL

WRITE FOR OUR DESCRIPTIVE CIRCULARS

THE BLANCHARD MACHINE COMPANY
14 STATE ST. CAMBRIDGE, MASS., U. S. A.

A New Source For

TRI-SODIUM PHOSPHATE

The Tidewater division of the American Chemical Paint Company has developed and now **manufactures** a new type free-flowing Tri-Sodium Phosphate which is furnished in standard T.S.P. Containers. A sample and a quotation on your requirements will be furnished on request.

TRISILA

A new alkaline detergent for use with all soaps and cleansers is also manufactured by this company. Samples and prices on request.

CHEMICALS ACP PROCESSES

AMERICAN CHEMICAL PAINT CO.
TIDEWATER DIVISION
New Castle, Delaware

"MOPCO" 65%
BOILED DOWN
COTTONSEED SOAP

ALSO SPOT AND FUTURE SHIPMENTS

RAPESEED OIL
TEASEED OIL
HEMPSEED OIL

FISH OIL FATTY ACIDS

MURRAY
OIL PRODUCTS CO.
INCORPORATED
21 WEST ST., NEW YORK

We Manufacture

For The Trade ONLY

Liquid Soap Base
Auto Soaps
Potash Oil Soap
Shampoo
U.S.P. Cresol Compound
Coal Tar Disinfectants
Liquid Soap
Pine Oil Soap
U.S.P. Green Soap
Shampoo Base
Pine Oil Disinfectants
Insecticides

Ask for samples of these specialty bulk products

HARLEY SOAP CO.
2852 E. Pacific St. Philadelphia

Superintendent and Soapmaker—Can make and analyze all kinds of soap and soap material. Address Box No. 567, care *Soap*.

Soapmaker — Twenty years' experience. Can make and analyze all kinds of soaps and products. Salary reasonable and hard worker. Address Box No. 568, care *Soap*.

POSITIONS OPEN

Wanted — A firm mining Wyoming Bentonite wants to get in touch with a technical man who has had experience in incorporating Bentonite in soap. Confidential correspondence solicited. Address The Wyodak Chemical Co., Station D, Cleveland, O.

A Prominent Manufacturer of liquid soaps, disinfectants, deodorizing cakes, etc., has an opening for a dependable sales representative. Address Box No. 563, care *Soap*.

Wanted—Men calling on insecticide companies, janitor supply houses, and exterminators, to sell a complete line of hand and electric sprayers to these outlets on a commission basis. Give full details as to lines handled and territory covered. Address Box No. 566, care *Soap*.

Wanted—Research chemist, graduate from recognized university, preferably with Ph.D. Degree, with at least five years' experience in the development of detergents. While some experience with soap would be advantageous, applicant must have experience with other detergents. Address Box No. 553, care *Soap*.

Miscellaneous

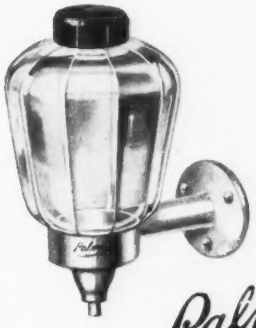
Household Cleanser—Manufacturer in Birmingham, London has a formula and household cleanser which has been unusually successful, desires to contact an American manufacturer for distributing agent to handle the sale of the product in the American market. For further details communicate with County Chemical Co., Ltd., "Chemico" Works, Bradford St., Birmingham 5, England.

Liquid Shave Soap—The original liquid shave soap available for manufacturing and marketing by a company of standing with established sales connections. Product now manufactured and sold in a small way. Finest product of its kind. Will work on a royalty basis. Communicate with owner by addressing Box No. 523, care *Soap*.

PALMER SOAP DISPENSERS

The Palmer SUPER SERVER Dispenser (right) is priced very low, but has no equal in value. Metal parts are non-corrosive, stainless, chrome alloy. One piece bracket in beautiful satin chrome-like finish. Valve parts easily removed for cleaning or replacement. Crystal glass decagon bowl (opal glass on special order)—decagon black bakelite cap. Large 1-inch opening makes filling easy—no need for removing or inverting bowl. The lowest priced push-in dispenser—yet neat, compact, durable.





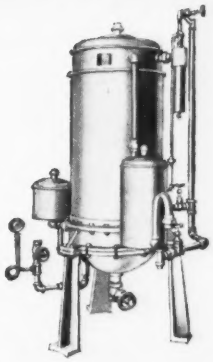
The Palmer "D.C." Dispenser (dependable construction), shown at the left, is the lowest priced dispenser offered. Has simple, positive spring-controlled valve. All metal parts chrome nickel plated. Fill through large 1-inch top opening without removing or inverting bowl. Crystal glass decagon bowl (opal glass on special order)—with decagon black bakelite cap.

Palmer PRODUCTS INC
WAUKESHA, WIS.
Adjacent to Milwaukee

NRA MEMBER U.S. WE DO OUR PART

"POLAR" WATER STILLS

Manufactured exclusively by us



Distillation is the only convincing answer to the demand for pure water. Polar Water Stills have had an outstanding acceptance where efficient, economical water distillation is required. Many thousands of them are in use and giving excellent service today.

The Industrial type shown above is steam operated and can be furnished in capacities to meet any requirements.

Smaller stills for laboratory use and small distillation requirements are furnished in urn, wall and stand types, electrically and gas operated.

U. S. Bottlers Machinery Co.
4012 No. Rockwell St. Chicago, Ill.
Offices in all principal cities

We announce development of new type soap colors

PYLAKLORS

They have good fastness to alkali, light, tin, ageing.

The following shades are already available:

Bright Green	Dark Brown
Olive Green	Palm Green
Yellow	Golden Brown
True Blue	Violet

It will pay you to send for testing samples.

PYLAM PRODUCTS CO., INC.

Manufacturing Chemists, Importers, Exporters

799 Greenwich St. New York City

Cable Address: "Pylamco"



We manufacture a complete line of high quality waxes for the jobbing trade, including no-rubbing liquid wax, regular type liquid wax, powdered wax, paste wax and also furniture polish. These products can be supplied in bulk, packaged under the Windsor label or with your own label which we supply.

WINDSOR WAX COMPANY

50 Church St. New York N.Y.

factory

611 Newark St. Hoboken, N.J.

Manufacturers of

WAX PRODUCTS EXCLUSIVELY

NRA

F. & S.

Quality Colors *for*

TOILET SOAPS

LIQUID SOAPS

TOILET PREPARATIONS

Long experience enables us to produce colors for all types of soaps.

If you have a shade you want matched send us a sample. We have complete facilities for matching.

Liquid soap colors a specialty—send for samples of F. & S. greens and ambers.

FEZANDIE & SPERRLE, Inc.

205 FULTON STREET

NEW YORK, N. Y.

Import—Manufacture—Export

What is the Best Concentration for a LIQUID SOAP?

☆

You will find the answer to this question, together with a full discussion of the whole subject of liquid soap concentration, on page 136 of the 1935 SOAP BLUE BOOK. The BLUE BOOK contains a vast amount of valuable reference material. Keep your copy handy and use it regularly. The answer is in your

SOAP BLUE BOOK

☆

Free to "Soap" Subscribers

Wanted—One large filter press in good condition—24 in. plates. Will pay cash. Give details and where it may be seen. Address Box No. 556, care *Soap*.

Wanted—Interested party will buy a going company selling nationally advertised items to drug stores. The company must be on an earning basis today. Probably the company we are looking for is "not for sale." We are not interested in any run-down firms or products, but only in a firm which is still doing an active business, wherein possibly the owner may desire to retire. Give complete details to Box No. 558, care *Soap*.

Wanted—Practical Mechanical Engineer and Efficiency Man. An old reliable soap company wants a first class Mechanical Man who understands efficient operation of machinery in a Soap Plant. One who can supervise installation of machinery and the proper efficient operation of all kinds of soap machinery. The more experience, the better, but mainly looking for one who can think and has ideas and can put those ideas into effect. Has good opportunity to advance and in time hold a good executive position. Write full details about yourself such as age, training, experience, etc. Correspondence held strictly confidential. Box 570, care *Soap*.

TOILETRY EXPORTS GAIN ON 1934

American exports of toilet soaps, dentifrices, shaving creams, etc. scored a good advance in 1934, the general average gain being about sixteen per cent. Tooth pastes and other dentifrices sold to foreign countries in 1934 were valued at $1,318,000 a gain in value of 19 per cent over 1933. While American dentifrices are known and purchased by every country of the world, British India, the Philippine Islands, Netherland India, British Malaya, and China are the leading markets for such products, statistics show. Toilet soaps, including shaving creams and powders, the second most important group on the list, advanced 13 per cent to $1,306,000, and were distributed generally to the same countries which buy American dentifrices. Other items among toilet requisite exports in 1934 included toilet powders, $593,000; manicuring preparations, $232,000; hair preparations, $356,000; cold creams, $228,000; lip sticks, $201,000; and perfumery, $114,000. Imports of toilet requisites, consisting chiefly of perfumery, castile soap, and face powders, advanced 16 percent in 1934.

—— ♦ ——

The annual meeting of the Manufacturing Chemists Association is to be held again this year at Skytop, Pa., June 6. It will be followed June 6-8 by the annual meeting of the Synthetic Organic Chemical Manufacturers Association.

KOPPERS
WHITE TAR
MOTH PROOFING PRODUCTS

Deodorizing
AND MOTHPROOFING
Blocks
PLAIN AND PERFUMED
MADE WITH NAPHTHALENE OR PARA BASE

NAPHTHALENE FLAKES, CHIPS, etc.
DISINFECTANTS EMULSION AND SOLUBLE TYPES
FLY SPRAYS HOUSEHOLD SPRAYS CATTLE SPRAYS

MEMBER
NATIONAL INSECTICIDE AND DISINFECTANT MFRS. ASSN. INC. INC. 1914

THE WHITE TAR COMPANY
OF NEW JERSEY, INC.
PHONE KEARNY 2-3600
BELLEVILLE PIKE KEARNY, N. J.

NEW AND REBUILT
SOAP MACHINERY

SPECIAL
Attractively priced for quick removal from plant:
1—Proctor two fan Soap Chip Dryer and set of Chilling Rolls.

1—5 Roll Steel Mill
1—10" Houchin-Aiken Plodder
1—Automatic Power Cutting Table
1—Broughton Mixer, jacketed
2—10A Blanchard Mills
3—Soap Presses, Foot and Power
6—Filter Presses, sizes 6" to 36"
6—Granite Stone Mills, 2, 3, and 4 rolls
1—Jones Automatic Soap Press
4—Jacketed Vertical Crutchers
2—1,500 lb. Horizontal Crutchers
2—Hand Power Slabbers
2—Hand Power Cutting Tables
3—Houchin Chippers, Belt Driven
1—Double Effect Glycerine Evaporator
600 and 1,200 lb. Frames, Kettles, Pumps, Tanks, Filter Presses, Wrapping Machines, Tube Fillers, Closers, Crimpers, Dry Powder Mixers, Pulverizers, Grinders Amalgamators, Mixers, etc.

Send for Complete List (Bulletin No. 15)
WE BUY AND SELL FROM SINGLE ITEMS TO COMPLETE PLANTS.

STEIN-BRILL CORPORATION
183 VARICK STREET NEW YORK, N. Y.
Phone: WAlker 5-6892-3-4
Cable Address: "BRISTEN"

Where to buy

RAW MATERIALS AND EQUIPMENT

for the Manufacture of Soaps and Sanitary Products

NOTE: This is a classified list of the companies which advertise regularly in SOAP. It will aid you in locating advertisements of raw materials, bulk and private brand products, equipment, packaging materials, etc., in which you are particularly interested. Refer to the Index to Advertisements, on page 130, for page numbers. *"Say you saw it in SOAP."*

ALKALIES

Columbia Alkali Co.
T. G. Cooper & Co.
Dow Chemical Co.
Eastern Industries
Hooker Electrochemical Co.
Innis, Speiden & Co.
Niagara Alkali Co.
Solvay Sales Corp.
Jos. Turner & Co.
Warner Chemical Co.
Welch, Holme & Clark Co.

AROMATIC CHEMICALS

American-British Chemical Supplies
Compagnie Parento
Dodge & Olcott Co.
Dow Chemical Co.
P. R. Dreyer, Inc.
E. I. du Pont de Nemours & Co.
Felton Chemical Co.
Fritzsche Brothers, Inc.
Givaudan-Delawanna, Inc.
Magnus, Mabee & Reynard, Inc.
Merck & Co.
Monsanto Chemical Co.
Naugatuck Chemical Co.
Schimmel & Co.
Solvay Sales Corp.
A. M. Todd Co.
Ungerer & Co.
Van Ameringen-Haebler, Inc.

BULK AND PRIVATE BRAND PRODUCTS

An-Fo Manufacturing Co.
Baird & McGuire, Inc.
Clifton Chemical Co.
Davies-Young Soap Co.
Eagle Soap Corp.
Federal Varnish Co.
Fuld Bros.
Hammond Paint & Chemical Co.
Harley Soap Co.
Hysan Products Co.
Hull Co.
Koppers Products Co.
Kranich Soap Co.
Palmer Products
Philadelphia Quartz Co.
John Powell & Co.
Geo. A. Schmidt & Co.
White Tar Co.
Windsor Wax Co.

CHEMICALS

American-British Chemical Supplies
Bowker Chemical Co.
Columbia Alkali Co.
T. G. Cooper & Co.
Dow Chemical Co.
E. I. du Pont de Nemours & Co.
Eastern Industries
General Chemical Co.
Grasselli Chemical Co.
Hooker Electrochemical Co.
Industrial Chemical Sales Co.
Innis, Speiden & Co.
Mechling Bros. Chemical Co.
Merck & Co.
Monsanto Chemical Co.
Niagara Alkali Co.
Philadelphia Quartz Co.
Solvay Sales Corp.
Standard Silicate Co.
Swann Chemical Co.
Jos. Turner & Co.
Victor Chemical Works
Warner Chemical Co.
Welch, Holme & Clark Co.

COAL TAR RAW MATERIALS
(Cresylic Acid, Tar Acid Oil, etc.)

American-British Chemical Supplies
Baird & McGuire, Inc.
Barrett Co.
T. G. Cooper & Co.
Innis, Speiden & Co.
Koppers Products Co.
Monsanto Chemical Co.
Reilly Tar & Chemical Co.
White Tar Co.

CONTAINERS and CLOSURES

American Can Co. (Tin Cans, Steel Pails)
Anchor Cap & Closure Corp. (Closures & Bottles)
Cin-Made Corp. (Paper Cans)
Continental Can Co. (Tin Cans)
Hinde & Dauch (Corrugated Fibre Products)
Maryland Glass Corp. (Bottles)
National Can Co. (Tin Cans)
Owens-Illinois Glass Co. (Bottles)
Wm. Vogel & Bro. (Tin Cans)
Wilson & Bennett Mfg. Co. (Steel Pails and Drums)

DEODORIZING BLOCK HOLDERS

Cin-Made Corp. (Paper)
Clifton Chemical Co.
Eagle Soap Corp.
Fuld Bros.
Hysan Products Co.
Palmer Products, Inc.

ESSENTIAL OILS

Compagnie Parento
Dodge & Olcott Co.
P. R. Dreyer Inc.
Fritzsche Brothers, Inc.
Leghorn Trading Co.
Magnus, Mabee & Reynard, Inc.
Schimmel & Co.
A. M. Todd Co.
Ungerer & Co.
Van Ameringen-Haebler, Inc.

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PROFESSIONAL DIRECTORY

PEASE LABORATORIES, Inc.
Chemists, Bacteriologists, Sanitarians
39 West 38th Street
New York

Food, Drug and Cosmetic Problems—Compliance with Official Requirements—Meeting New and Anticipated Competitions with Improved and New Products

H. A. SEIL, Ph.D E. B. PUTT, Ph.C., B.Sc.
SEIL, PUTT & RUSBY, INC.
Analytical and Consulting Chemists
Specialists in the Analysis of Pyrethrum Flowers, Derris Root, Barbasco, or Cube Root—Their Concentrates and Finished Preparations
ESSENTIAL OILS SOAP
16 East 34th Street, New York, N. Y.

STILLWELL AND GLADDING, Inc.
Analytical and Consulting Chemists
Members Association of
Consulting Chemists and Chemical Engineers
130 Cedar Street New York City

LLOYD A. HALL
Analytical and Consulting Chemist
Specializing in the analysis, development, investigation, and improvement of
Soaps, Disinfectants, Cosmetics, Drugs, Polishes and Sanitary Specialties.
RESEARCH—CONSULTATION
1415 W. 37th STREET CHICAGO, ILL.

KILLING
strength of Insecticides
by PEET GRADY METHOD
(Official I. & D. code method) and
PYRETHRINS in PYRETHRUM FLOWERS
(by Gnadinger's Method)
We raised and killed more than 1 million flies in the last 2 years
ILLINOIS CHEMICAL LABORATORIES, INC.
75 E. WACKER DRIVE CHICAGO, ILL.

COST SYSTEMS
Designed and installed for Soap Manufacturers and allied industries. Service in—Cost Analysis—Federal Taxation—Audits and Financial Statements.
TWENTY-FIVE YEARS' EXPERIENCE
LOUIS J. MUEHLE & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
DES MOINES IOWA

Skinner & Sherman, Inc.
246 Stuart Street, Boston, Mass.
Bacteriologists and Chemists
Disinfectants tested for germicidal value or phenol coefficient by any of the recognized methods.
Research—Analyses—Tests

CONSULTANTS
offering their services to manufacturers of soaps and sanitary specialties should apprise the industry of their facilities through this professional card department. SOAP reaches 2,200 manufacturers who need help of a professional nature.

Entomological Testing Laboratories, Inc.
We offer you a medium for purchasing insecticides on an intelligent basis.
Entomological testing by the Peet-Grady method, and chemical examination of insecticides are available.
114 E. 32nd St. New York, N. Y.

A manufacturer of soap powder found that he had rejections from time to time because of the composition not being what he supposed it was. Now he has the composition checked once a week to make sure that his production is uniform. The saving in preventing one rejection is sufficient to pay the cost of such service for a year.

Foster D. Snell, Inc.
Chemists-:-Engineers
305 Washington St.,
Brooklyn, N. Y.

Protect Your Products by
Patents—Trade Marks
All inventions submitted held confidential and given personal attention by members of the firm.
Form "Evidence of Conception" and instructions "How to Establish Your Rights"—Free
LANCASTER, ALLWINE & ROMMEL
Patent Law Offices
420 Bowen Building Washington, D. C.

RAW MATERIAL AND EQUIPMENT GUIDE

(*Continued from page* 126)

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MACHINERY

Blanchard Machine Co. (Soap Powder)
Ertel Engineering Corp. (Filters, Mixers, Bottle Fillers)
Anthony J. Fries (Soap Dies)
Houchin Machinery Co. (Soap Machinery)
Huber Machine Co. (Soap Machinery)
International Nickel Co. (Monel Metal)
R. A. Jones & Co. (Automatic Soap Presses and Cartoning Machinery)
Package Machinery Co. (Packaging)
Proctor & Schwartz (Dryers)
C. G. Sargent's Sons Corp. (Dryers)
Stokes & Smith Co. (Packing Machinery)
U. S. Bottlers Machinery Co. (Bottle Filling and Cleaning)

MACHINERY, USED

Consolidated Products Co.
Newman Tallow & Soap Machinery Co.
Stein-Brill Co.

MISCELLANEOUS

Anchor Cap & Closure Corp. (Metal Caps)
T. G. Cooper & Co. (Waxes)
Dobbins Mfg. Co. (Pails, Mop Wringers, etc.)
Exterminating Materials Co.
General Naval Stores Co. (Pine Oil-Rosin)
Hercules Powder Co. (Pine Oil and Rosin)
Industrial Chemical Sales Co. (Decol. carbon, Chalk)
Innis, Speiden & Co. (Fumigants and Waxes)
Pylam Products Co. (Lathering Agent)
Rohm & Haas Co. (Insecticide Base)
Sanitor Mfg. Co. (Paper Seat Covers)

OILS AND FATS

T. G. Cooper & Co.
Eastern Industries
Industrial Chemical Sales Co.
Leghorn Trading Co.
Murray Oil Products Co.
Newman Tallow & Soap Machinery Co.
Theobald Animal By-Products Refinery
United Africa Co.
Welch, Holme & Clark Co.

PARADICHLORBENZENE

Dow Chemical Co.
E. I. du Pont de Nemours & Co.
Hooker Electrochemical Co.
Merck & Co.
Monsanto Chemical Co.
Niagara Alkali Co.
Solvay Sales Corp.
Jos. Turner & Co.

PERFUMING COMPOUNDS

Compagnie Parento
Dodge & Olcott Co.
P. R. Dreyer, Inc.
Felton Chemical Corp.
Fritzsche Brothers, Inc.
Givaudan-Delawanna, Inc.
Magnus, Mabee & Reynard, Inc.
Schimmel & Co.
Ungerer & Co.
Van Ameringen-Haebler. Inc.

PETROLEUM PRODUCTS

Atlantic Refining Co.
O'Connor & Kremp
Sherwood Petroleum Co
L. Sonneborn Sons.

PYRETHRUM AND DERRIS PRODUCTS

Insect Flowers and Powder, Pyrenthrum Extract
Derris Products

An-Fo Mfg. Co. (Extract)
R. J. Prentiss & Co.
Derris, Inc.
Hammond Paint & Chemical Co.
McCormick & Co.
McLaughlin, Gormley, King Co.
S. B. Penick & Co.
John Powell & Co.
Sherwood Petroleum Co.

SOAP COLORS

Fezandie & Sperrle
Interstate Color Co.
Pylam Products Co.

SOAP DISPENSERS

Clifton Chemical Co.
Eagle Soap Corp.
Fuld Bros.
Palmer Products

SODIUM SILICATE

General Chemical Co.
Grasselli Chemical Co.
Mechling Bros. Chemical Co.
Philadelphia Quartz Co.
Standard Silicate Co.

SPRAYERS

Breuer Electric Mfg. Co.
Dobbins Mfg. Co.
Electric Sprayit Co.
Hudson Mfg. Co.
Lowell Sprayer Co.
Wm. Vogel & Bro.

TRI SODIUM PHOSPHATE

American Chemical Paint Co.
Bowker Chemical Co.
General Chemical Co.
Grasselli Chemical Co.
Swann Chemical Co.
Victor Chemical Works
Warner Chemical Co.

SOAP FACTORY
for SALE or LEASE

Buy or rent this modern, fully equipped soap factory located within 100 miles of four leading Eastern Seaboard cities. Consists of office and two plant buildings, 95,000 sq. ft. factory floor space, with r.r. siding. Equipped with six large kettles, one medium size and one small one (6,000 gal.), twelve storage tanks, 100 soap frames, four toilet soap mills, modern soap flaking machinery, plodders, presses, cutter, slabber, etc. No other soap plant in locality. Raw materials nearby. Can be purchased or leased from the owners on an attractive basis but machinery will not be sold separately. Communicate with

Factory Owner : Box No. 450
Care SOAP, 254 W. 31st St., New York

HULL
POWDERED
METAL POLISH

sets a new standard of excellence and economy for metal polish.

THE HULL COMPANY
305 Washington Street
Brooklyn, N. Y.

When in CHICAGO
Sleep in Mountain Air
AT THE 46-STORY
MORRISON HOTEL Madison and Clark Streets
THE CENTER OF DOWNTOWN



In the unbroken silence of a Morrison Tower room, you sleep soundly all night; yet you are only an elevator ride from the heart of the business district.

SINGLE ROOM $2.50 UP
$4.00 Double
with Bath, Servidor and Circulating Ice-Water

Home of
TERRACE GARDEN
and
BOSTON OYSTER HOUSE

LEONARD HICKS, *Managing Director*

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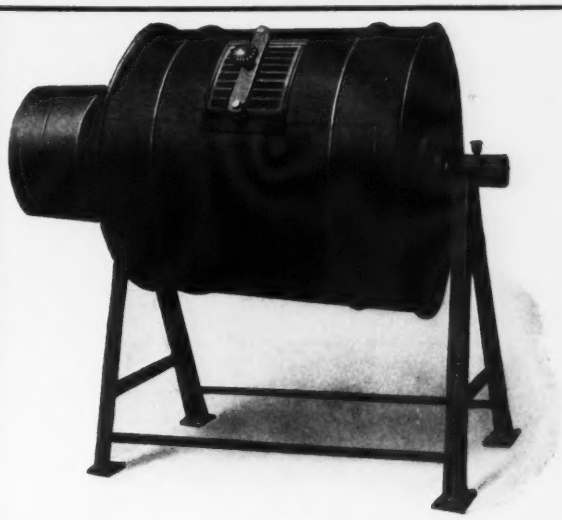
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